Clinical Lecture
ON
ANEURYSM.

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GENTLEMEN,—We have now in the wards a case of popliteal aneurysm which is especially interesting as occurring in a woman. Aneurysm in a woman is comparatively rare, and certainly popliteal aneurysm is very uncommon, for I do not myself remember to have seen one before. The reason of it in the present case is easily to be found, and you will remember that I called attention to it when the patient was first admitted. She is paralysed on the right side, and the explanation therefore is that the left leg has had to do more than its share of work, and consequently the artery has become aneurysmal. This woman is forty-seven years of age. There is nothing special in her history bearing upon the disease, and I need not trouble you with the details. She seems to have noticed a lump in the popliteal space for some little time since Christmas, and she came here one day complaining of something the matter with her knee. You will remember that I did not see her with you till Friday week, and we then found that she had a well-marked popliteal aneurysm.

Let me say here one word with regard to the diagnosis. There was a pulsating swelling which was evidently in direct communication with the artery, because the moment we compressed the femoral artery we stopped the pulsation in the sac; then, on very gently pressing the sac while the artery was held, we found we could slightly diminish it, and on letting go the main artery again we got the distensile pulsation which is so characteristic of aneurysm. The whole of the pulsations are more or less distensile, for if you put your fingers upon the aneurysm you feel that they are separated one from the other; but the best way of demonstrating it absolutely to a class is to stop the pulsation for a moment, and then allow the tumour to swell out suddenly; then you see at once that it must be an aneurysm. There was in this case an aneurysmal bruit, which means of course that on listening to the sac we hear the sound of the rush of blood. You must not suppose that every aneurysm has a bruit, nor, on the other hand, that every tumour which has a bruit is an aneurysm. You can produce a bruit artificially in a healthy artery by pressure with the edge of the stethoscope, and some cases of vascular tumour have a very distinct arterial bruit in them. Sometimes you get quite a noisy bruit, as in cases of so-called aneurysm of the internal carotid in the head, but in many of these there is no aneurysm. We found that the woman had a large saccular aneurysm. Most popliteal aneurysms are sacculated, for it is very rarely indeed, I believe, that you get a fusiform aneurysm, which is an aneurysm formed by a uniform dilatation of the coats of the artery. With regard to the division into true and false aneurysm, I should hold that every aneurysm which still contains blood within the coats of the artery is a true aneurysm; but if the coats of the artery have given way, and the blood is outside the artery, and a sac is formed by the surrounding tissues, I should call that a false aneurysm. I am aware that that is not strictly the definition always given, but it is sufficient for all practical purposes. And now as to treatment.

I thought that both for the woman and also for you it would be well to try other methods of treatment before resorting to the *ultima ratio* of ligature of the artery. There did not seem any special urgency about the case to require the ligature immediately. Therefore you will remember that we arranged that there should be digital compression of the main artery, and we told off the dressers *seriatim* to hold the common femoral artery and cause stagnation of the blood in the sac. What would be the method of cure brought about by that treatment? It is obvious that our object was to stagnate the blood in the aneurysm, and there, if possible, to produce coagulation of the contents of the sac. If we had succeeded—which we did not do,—the clot formed there would have been very much like the clot formed in the basin when you bleed a patient; it is the clot sometimes called a "soft clot," which was held by the older authorities on aneurysm—Broca particularly—not to be capable of producing a true cure of aneurysm. I quite agree that in many cases that clot undergoes changes afterwards which lead to an unfortunate result. I mean that you may get a certain amount of clot, as we did in this patient, by careful compression of the main artery, and a very few hours after the compression is left off the whole of the clot is washed away into the general circulation, and the aneurysm is beating much as before.

Now, the pressure was kept up for four hours on Feb. 22nd, from ten minutes past three until ten minutes past seven, on the very first day on which we saw the patient. At the end of that time the tumour seemed distinctly harder and the pulsation less, no movement of the knee being caused by the pulsation. But the next morning when I saw her I thought that there was not any definite improvement; in fact, the little clot that was there had been washed away. I therefore adopted a plan of treatment which is sometimes useful in these cases—namely, flexing the joint forcibly, bending the knee so thoroughly that the aneurysm is slightly compressed against its own artery. In that way we found that we could very nearly stop the pulsation, not completely, and that position was kept up during the whole of the next day. But there was no permanent improvement, and on Feb. 24th instrumental compression was begun at 10.45 A.M., and carried on till 8.45 P.M. A Carte's tourniquet was applied to the groin, and a horseshoe tourniquet below it. The pulsation of the aneurysm was not completely arrested purposely, because we did not want in that case completely to arrest it.

Let us now contrast these methods. The object of the first, compressing by digital means, and stopping pulsation in the aneurysm completely, was if possible to produce coagulation of the contents, and the flexion treatment had exactly the same object. But the instrumental compression which we took up on Feb. 24th had a very different object; we purposely did not stop the circulation completely through the aneurysm, but we allowed a little blood to trickle past by just graduating the compression sufficiently to obstruct but not to stop the artery. Under these circumstances we hoped to get a cure by quite a different method—namely, a deposit of laminated fibrine within the sac, and this method is no doubt that by which nature cures aneurysms. You see occasionally in post-mortem examinations an aortic aneurysm, for example, either absolutely cured, or so far cured that it gives no trouble, by thick deposits of laminated fibrine. If you look in the museum you will see plenty of specimens illustrating this point, and you may see sections of cured aneurysms in the bottles on the table. You will observe dense white fibrine which must have been deposited in layers one upon the other from the outside of the aneurysm towards the centre. That is the method of cure by laminated fibrine, and it is no doubt the best method; indeed, the older surgeons held that it was the only cure, but that is not true. Aneurysms can be cured by coagulating the contents of the sac, but the cure is apt to be evanescent.

I ought to have mentioned that I put the patient first upon a limited diet—namely, meat, six ounces; bread, six ounces; milk, one pint; tea, half a pint; and two or three ounces of rice, to be made up into a pudding with a little milk. She had, you observe, a full allowance of meat, but I limited the bread and cut down the fluids as much as possible. That is the kind of diet that you want to give to aneurysmal patients. You want to increase the plasticity of the blood, and you do that by diminishing the watery part of it, putting the patient upon a limited amount of fluid, and also increasing the fibrinous portion of the food. Then I put her upon iodide of potassium in twenty-grain doses. There is a feeling among physicians rather than among surgeons that iodide of potassium does good in some cases of aneurysm. It certainly could do no harm, and therefore I thought it well to give iodide of potassium at the same time that she was under these various methods of treatment. Nevertheless we failed. Was there any other method which might have

been adopted before I tied her artery? There was one, but I did not think it well to adopt it; I think it right, however, that you should know it. It is the application of Esmarch's bandage. In order to do this properly you must put on an elastic bandage from the foot up to the aneurysm, and you must put on another from the thigh downwards to the aneurysm; the result being that you squeeze all the blood of the limb into the aneurysm so that you make it tense, and you make the blood perfectly stagnant in the sac. If you can do that for two or three hours you may hope to produce coagulation of the contents. Some years ago, when the plan was first suggested by Dr. Reid, R.N., I tried it here in two cases, and I have brought the notes of them with me.[1] The first case was that of a man aged thirty-two, a coal miner, who had a large popliteal aneurysm. On Oct. 29th, 1879, at 3 P.M., half a grain of morphia having been injected beneath the skin of the right thigh, Esmarch's bandage was applied to the limb in the usual manner, reaching to the lower border of the sac. A piece of Martin's india-rubber bandage was applied from above downwards in the thigh, stopping well above the aneurysm, and over the bandage the elastic cord was tightly drawn. At 4 P.M. the patient was placed under the influence of dichloride of ethedene (now we should put the patient under ether), the pain produced by the treatment having become very severe. At 6 P.M. the tourniquet and the bandage were removed (the former first) and the anæsthetic discontinued; all pulsation had ceased in the sac, and it was apparently solid. One hour afterwards, however, a slight return of pulsation was noticed by the house-surgeon. Two of Carte's compressors were therefore applied (one to the groin and the other to the middle of the thigh), and the artery controlled by them alternately. Compression was thus kept up until 9 A.M. on the 30th. The result was a complete cure.

The second case was that of a man aged thirty-seven, who was admitted under my care on Dec. 2nd, 1879. He had a large popliteal aneurysm which was thought to be fusiform. The aneurysm had no thrill in it, and no bruit. On Dec. 3rd Esmarch's bandage and tourniquet were applied as before, and were kept on for three hours and a half, the patient being under the influence of dichloride of ethedene the greater part of the time. He also made a good recovery.

You may naturally say: "If those two cases recovered, why not adopt the method in the case of this patient?" Well, because there is, no doubt, a little risk of gangrene, and other surgeons have not been so fortunate as I was in those cases. I therefore preferred to tie the femoral artery.

Having made up my mind to tie the artery, I gave the patient (all these methods being a little exhausting) a couple of days' rest, and on Feb. 27th I tied the femoral artery—of course the superficial femoral artery; I tied it where it is crossed by the sartorius muscle, and there was no difficulty in finding it. I made a free incision (and I am sure, if you are to tie arteries successfully, you must have plenty of room) through the skin and fascia, and exposed the sartorius muscle, which was drawn a little outwards. Then the sheath of the vessel was exposed, which I opened carefully with a knife and forceps, and then slipped the needle round, disturbing the parts as little as possible. I feel confident that a successful result depends very much upon the way in which the artery is tied. If you isolate it much, if you pull it about and bruise it with directors and instruments of that kind, you can hardly expect that the artery will do well afterwards. I am sometimes shocked at examinations to see young surgeons, when called upon to operate, taking a steel director and tearing out the artery for an inch or more in length. Luckily it is a dead artery, so that it does not much matter; but if it were living, the chances are that there would be secondary hæmorrhage. I think that is one explanation of the statement lately made by Mr. Ballance at the Royal College of Surgeons that the great mortality after the ligaturing of large arteries was due to secondary hæmorrhage. Now, I have tied a pretty good number in my time, but I am happy to say that I have never seen secondary hæmorrhage. I saw Sir Wm. Fergusson's practice for many years, and he tied a great many arteries, but I never knew a case of secondary hæmorrhage; but I have known it occur in the practice of another surgeon in two cases. One was in the femoral and one in the carotid, and both cases were fatal, as such cases usually are. The artery may be too diseased to bear a ligature. That, of course, is very unfortunate; and if you do get an artery so diseased, perhaps the best course is to use a very large ligature. But if the artery is healthy enough to bear a ligature, it is possible that it may have been too much torn or disturbed at the time of the operation. That is one great argument against a practice which is a very old one, but which has been revived within the last few years by St. Bartholomew surgeons—viz., tying the artery in two places and dividing between. The theory is that, if you have an artery divided in that way, its elasticity is expended by retraction, and there can be no tension upon the point of the ligature. Now, this practice seems to me to add considerable risk to the operation. You must isolate the artery considerably to get two ligatures round it; and, moreover, by cutting the artery through, if one ligature should happen to slip, you lay yourself open to secondary hæmorrhage, and that is what has occurred. A surgeon tied the subclavian artery—you know how short that is—in two places, and divided the vessel between; half an hour afterwards one of the ligatures slipped, the result being that excessive hæmorrhage occurred, and the patient died.

My advice is to tie with a good silk ligature and to tie tightly, and that brings me to another matter which has been lately laid down by Mr. Ballance in his lectures—namely, that we are wrong in tying tightly, and that we should not tie sufficiently tightly to divide the coats of the artery. Let me explain what you do when you tie a ligature tightly. What you do is to divide the internal and middle coats which contract and retract above and below the ligature, by which the external cellular coat is firmly embraced. That I believe is the best plan, because if you use, as we now do, an aseptic ligature, nothing more happens. The ligature in the case upstairs has never come away and never will; it is lying quietly, surrounding the external coat, and strengthening it materially; the middle coat has retracted and become agglutinated by lymph, and firmly closed; and therefore the risk of secondary hæmorrhage is reduced to a minimum. I quite allow that when we had septic ligatures, when we used to tie with silk or hemp, which came away afterwards (and we left the end of it out to pull at), there was a little more risk. Supposing that firm union had not taken place, and the parts had not become amalgamated, then was the time for secondary hæmorrhage to occur. I have here a specimen which illustrates the subject. Here is the carotid of a young woman who died some years ago. I applied a ligature, and the patient died a few days afterwards from softening of the brain, which is not a very unusual result of ligature of the carotid. The two ends of the aseptic silk are still to be seen in position. The coats of the artery are evidently tied closely, and you can see a considerable clot above the ligature and a smaller clot below. You could not have a better illustration of the use of an aseptic silk ligature.

You may know, perhaps, that it has been proposed to use catgut ligatures instead of silk, and when those ligatures first came in I tied a femoral artery with one of them in this theatre. It was a case of popliteal aneurysm, and I tied the femoral in the ordinary way; but in a few days pulsation returned in the aneurysm and all the way up the femoral artery. It was evident that in the effort made not to tie the artery so tightly as to cut the coats, I had not obliterated the artery at all; and that, the catgut ligature having softened, had given way, and so the current of blood had poured on. I solved the difficulty by putting a silk ligature a little lower down, and the patient got well.[2] Mr. Thomas Smith, of St. Bartholomew's, was not so lucky. He had a case of that kind, where he tied the femoral artery with catgut, and the same thing took place; the catgut gave way, and the pulsation returned. But, unfortunately, he tied the ligature a little tighter than I did, and the result was that he weakened the coats of the artery at the point of ligature, and within a few weeks an aneurysm developed at that point, so that the patient's condition was aggravated by the operation, because he had a second aneurysm developed at the seat of the ligature in addition to the one below.

So much for the question of ligature and the question of operation in this case. Now let me say a word with regard to what has happened in the sac of the aneurysm since the

[1] Clin. Soc. Trans., vol. xiii.

[2] Ibid., vol. xi.

ligature was tied. Is it a cure by coagulation of the contents of the sac, or is it a cure by deposit of fibrine? It is a little difficult to be sure in this case, because I am happy to say we have not had an opportunity of examining the sac, and I hope we shall not have it, but I rather think it is a cure by coagulation of the contents, and for this reason. We had a certain amount of clot in the sac before the operation. I then tied the femoral artery, and we have never had the slightest pulsation in the sac since. Now in order to get deposit of laminated fibrine you must get a current of blood going through the sac, but we have never had anything of the kind; it has been solid from the first; therefore I think I may say (with a certain amount of hesitation) that we have here a cure by means of the coagulation of the contents of the sac. The effect of the ligature was to do what we tried to do by digital compression, but we failed then to get complete stasis of the contents of the sac, and as a consequence of the ligature we have now coagulation of the contents of the sac and a cure. Now, believing that to be the case, I have been very careful to avoid manipulating the sac since. I think it is quite possible that if we were to over-manipulate the sac and pull it about too much we might displace some of the clot and disturb the cure.

With all your care accidents will sometimes happen, whether the cure is from coagulation or from deposit of fibrine. Sometimes the sac of an aneurysm gives way within a very few hours of the ligature of the main artery, and it is a serious matter, because it almost always involves gangrene of the limb and amputation. What is the explanation? I believe it is this, that there is a very thin sac which has possibly undergone a certain amount of manipulation in previous attempts at cure by compression. Then the surgeon resolves to tie the main artery, and when he is doing it some of the bystanders, being very anxious to see that the pulsation has ceased, manipulate the sac. I always take care to avoid that. I only allow one gentleman to put his finger on the sac to assure me that the pulsation has ceased.

Then there is another thing that may happen, and it might happen in this case—inflammation of the parts surrounding the sac might come on. It is said to be inflammation of the sac itself, and possibly it may be; but I think it is rather of the surrounding structures, and is set up probably from the same causes as those I have mentioned—viz., by over-manipulation, and then an abscess forms and has to be opened, and you find that it communicates with the sac of the aneurysm. Now, that is not necessarily a fatal thing at all. If it does not occur for some days after the ligature, the aneurysm has become solid, as you see in these specimens. You open the abscess, and perhaps some of the clot may be discharged, and perhaps not; and although it is an anxious case, still the patient may do well. I have known it occur in a case of carotid aneurysm. A colleague of mine tied the carotid, and subsequently suppuration of the sac of the aneurysm took place, yet there was no secondary hæmorrhage, and the patient got well.

I have been hitherto speaking of the treatment of aneurysm entirely by proximal methods. All the methods I have mentioned have been between the aneurysm and the centre of the circulation, but you must understand that there are methods which we are sometimes obliged to adopt called the distal methods, and I will say a word or two about them so as to put the matter clearly before you. There are of course arteries like the innominate, or the first part of the subclavian, or the carotid low down, where you cannot get to the proximal side of the artery. There have been one or two attempts (you may see Liston's attempt in our museum) to tie the first part of the subclavian artery, and to tie the innominate, but they have always proved fatal, because when the ligatures came away secondary hæmorrhage occurred. Liston tried to avoid that by tying the carotid as well as the first part of the subclavian in the case in the museum, but the same thing happened, and the patient died. Of course it is possible nowadays, with septic ligatures, that we might succeed in getting a ligature on so near the heart, but it would be a bold surgeon who would do it, because it is a difficult operation, and the results have been so exceedingly unsatisfactory. Therefore for these cases one of the methods suggested for treatment has been what is called the distal ligature, and it is often called Brasdor's operation—not that Brasdor did it. Although it was suggested by a French surgeon, it was an English surgeon, Wardrop, who, in 1827, first tied a distal ligature at the root of the neck. He tied the carotid for aneurysm of the innominate, and afterwards the subclavian. You will observe the difference between the two if you think of the anatomy of the parts. The carotid artery runs up from the arch of the aorta, and you have a considerable length of vessel upon which you can put a ligature without any branch intervening between it and the main artery below. But it is very different with regard to the subclavian. From the first part the vertebral, the internal mammary, and the thyroid axis come off, and from the second part there is the superior intercostal given off. Now, imagine that you do as Wardrop did—put a ligature upon the third part of the artery. There are a number of branches intervening between the point of the ligature and the main artery, so that, as I understand it, Brasdor and Wardrop are not exactly the same thing, though we generally call both the distal operation. Then, of course, you can combine the two operations. I myself in 1865 tied these two arteries—the subclavian in the third part, and the carotid artery in the neck—in the case of a woman who had a large aneurysm believed to be of the innominate; but it turned out four years and a half afterwards, when she died, that the diagnosis was incorrect, and that it was really a case of aortic aneurysm. Still, she was immensely relieved, and if she had been careful of her health she might have lived longer, I think. The specimen is in the museum of the College of Surgeons. It is beautifully dissected, and it is injected so that it shows all the anastomoses very nicely.

Of course, these operations must be done upon a different principle from the proximal operations, and surgeons are not quite agreed as to what the effect of tying the distal ligature is. Some say, as Mr. Erichsen holds, that by tying the carotid and the third part of the subclavian you cut off two-thirds of the blood, and leave only one-third to come through the arteries. But the fact that you have tied the artery in these two places, and prevented the blood going beyond, does not prevent the normal quantity coming in below; therefore, it would rather seem, if it were followed out, that by stopping the current of blood beyond the aneurysm you would throw a greater strain upon the aneurysm itself, which, we hope, is not the fact. Then Mr. Holmes has suggested that the clotting extends from the point of the ligatures backwards into the sac of the aneurysm. Now, I have proved that not to be the fact, and specimens in the museums show that it is not so. Therefore, we come to my own theory upon the subject. I only advance it tentatively—that is, that the ligature applied on the distal side of an aneurysm has some effect in altering the direction of the current of blood. I do not know how, but I am sure that if you tie the arteries beyond an aneurysm it is that alteration in the direction of current which leads to clotting in the sac. I allow that it is not a satisfactory explanation, but I think it is more satisfactory than the other two.

It has been suggested that you should inject fluids into the aneurysm, and this has been tried. Perchloride of iron has been injected. Mr. Beck had a case here a few years ago in which he did it, and it produced a certain amount of coagulation, but without any permanent effect. Again, it has been suggested that either horsehair or thin wire should be put in the aneurysm, so as to produce coagulation of the contents, and so bring about a cure. The late Mr. Moore of the Middlesex Hospital was the first to do it, and it has been repeated a few times, and with success in the case of the abdominal aorta; but it is a fact that no patient has recovered who has had any foreign body put into a large aneurysm of the root of the neck. With regard to other methods, it has been suggested that injecting ergotine into the neighbourhood of an aneurysm might do good; but it is absurd. The idea is that it will cause contraction of the muscular fibre, but if you look at any specimen of aneurysm you will see that there is very little muscular fibre in it, and it could not be affected by the small quantity of ergotine thrown in.

Lastly, there are two suggestions of Sir W. Fergusson's which I ought to mention. One is that in the case of an aneurysm of the subclavian artery in the first part, which cannot possibly be treated by a proximal ligature, you should amputate at the shoulder, and then tie the axillary artery at the end of the stump. In that way you get rid of the limb, and therefore to a certain extent get rid of the danger of secondary hæmorrhage. Mr. Luther Holden and the late Professor Spence of Edinburgh each had a case, and I myself have had a case where I thought it right (the man's arm being perfectly useless and paralysed) to

amputate at the shoulder-joint; but I should not do it again, because I do not think it did any good. The aneurysm progressed as before.

Then there is the question of displacing some of the clot. Sir William Fergusson proposed to manipulate some of the clot out of the aneurysm with a view of blocking the artery beyond. It was done in one or two cases, but without any permanently good result.

INFLUENZA IN EAST ANGLIA.

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THE epidemic of influenza has now fully invaded and spread through this district, and a large section of the population has been suffering from illness of greater or less severity. In consequence, we as practitioners have had to deal with a large number of cases of acute disease, respiratory or otherwise, attributable to its influence. Its early presence in this county has already been noted by Dr. Manby, but the results of further and localised observation appear to be worthy of a short record in your columns. From personal observation of various epidemics of influenza in Norfolk, from that of 1847 downwards, I am able to say that the symptoms of the disease now present amongst us, although differing in some special and important respects from those of previous invasions, yet have a strong family likeness to them. On some former occasions the naso-frontal and catarrhal symptoms have usually been more pronounced than now, and it would almost seem as if in each succeeding epidemic these features of the disease have been less marked and essential. Still the same type remains, and what I wrote in THE LANCET of 1878[1] of the then prevailing disease would fairly well describe that now existing in this neighbourhood. In one respect this epidemic would seem to differ from preceding ones in that it appears to have travelled and spread irrespective of winds and uninfluenced by temperature or the mild weather; whilst certainly on some former occasions it has broken out so suddenly upon the giving way of a frost or the melting of snow as to point to the probability of a close connexion between the two circumstances.

As to the present disease, single or isolated cases of it have frequently occurred, but more often the "whole house" has been more or less affected, and its various members have all suffered, though in very different degrees. Some of them have had "bad colds," others chills and temporary feverishness, others have had scarcely any cold or cough, but much general pain and temporary fever; whilst occasionally one or more members of the household have been seriously ill, with oppressed breathing and pulmonary or pleuritic inflammations. In one family recently visited there were three suffering and dangerously affected, whilst the rest of the numerous party were scarcely importantly ill.

It is, I believe, generally accepted that the cause of this disease is an atmospheric miasmatic germ; and whether the reported discovery at Vienna of the specific germ itself be confirmed or not, certain it is that in all essential particulars the invasion of the disease occurs in the same way as does that of many of our well-known specific fevers, in which the presence of a microbal or bacillary cause is undisputed. For example, the initial rigor in severe cases, or the lesser chill in the slighter ones, with frontal headache, occasional vomiting or diarrhœa, and rapid and considerable rise of temperature, are all exactly what we are familiar with in other acute zymotic diseases, and are all unquestionably due to the sudden and rapid development in the body of fructifying germ life. In many of our cases, although there has been at first a little sneezing or a little "cold in the head," yet as a rule there has not been the active demand for pocket handkerchiefs and the strain upon the resources of this department witnessed on some former occasions. It has been plain that, although some local effect has been produced upon the nasal, naso-frontal, and pharyngeal mucous membranes, the morbid influence has been more especially exerted upon the system through the blood or the nerve centres, and then secondly upon the pulmonary organs. I say secondarily, because in some of the cases capillary bronchitis, pulmonary congestion, or inflammation and localised pleurisy have arisen or shown themselves more than a week after the attack, and where there could have been no possible exposure to chill after the seizure. To this condition we have, I think, some sort of analogy in the bronchitic or pneumonic trouble usually appearing in the second week of typhoid fever.

As elsewhere, the invasion of the disease has often been extremely sudden, in the midst of perfect health. Besides the chill or rigor there has then been usually a sudden sense of extreme illness, and of prostration of nerve power, the patient instinctively feeling that he *must* go to bed and get warm; and if a thermometer be used, the temperature is soon found to range from 101° to 104°, according to the severity of the seizure. Besides these, the patient has generally complained of pain, often severe, of the forehead, or more generally behind the eyeballs, of pain "all over him," or of the limbs, or not infrequently of pain of and below the waist and in the upper abdomen, this last being in many cases a marked and noticeable symptom. In a large number of cases these acute symptoms have passed off in from twenty-four to forty-eight hours, and the patient, though feeling poorly, has begun to convalesce. But out of a large household there has frequently been one member of the family, or more, in whom the illness has not so subsided, in whom the sensations of illness have continued, and in whom thoracic oppression, diaphragmatic pain, and some cough have gradually supervened.

The dyspnœa in these cases has sometimes been a striking feature, disproportionate to the extent of lung tissue affected, and occasionally of itself becoming a most formidable symptom. It is doubtless due to a condition of partial "pulmonary paralysis," and has been accompanied with a sense of extreme feebleness and helpless prostration. In these cases it has been noted that the muscular sound and the action of the heart have been extremely feeble, whilst the pulse at the wrist has been small and even thready. In the capillary bronchitis, the congestive pneumonia, or the pleurisy which has followed, the same sense of dyspnœa and prostration has continued in a marked degree; and although the pulse has been quick and the temperature high, yet there has sometimes been marked pallor of the skin, with a cool and clammy perspiration, and a cold feeling of the extremities, much as was noted by me as occurring in 1878—this condition pointing to cardiac asthenia more than to the apnœal and dyspnœal results of the pulmonary engorgement. Occasionally some limited pleurisy has developed itself at the base of the lung, and in these cases it has been noted how unusually acute has been the pain which accompanied it—a pain greater and more lasting than that of ordinary pleurisy (almost as if acute neuralgia of the part were superadded), and sometimes requiring considerable doses of opium or even injections of morphia for its alleviation.

The expectoration has varied greatly, sometimes scanty and colourless, at other times abundant, rusty, viscid, and truly pneumonic. The cough has rarely been severe or distressing. The decubitus, unlike that of ordinary pneumonia, has sometimes been remarkable. Even when a considerable part of one lung or portions of both have been choked by congestion, and when the difficulty of breathing has been considerable, I have seen patients lying almost flat down upon the bed, perspiring, pale, and evidently thus seeking relief to the cardiac asthenia and difficulty, more than to the effects of the pulmonary inflammation.

As to treatment. As might be expected when the cause is so definitely specific, it has not been always so immediately effective as might be wished. The slighter cases have soon got well of themselves, but many of them have required considerable nursing care afterwards. In the severer ones, without the addition of thoracic inflammation, prolonged rest in bed, warm liquid or semi-liquid feeding, a little wine, and some cinchona or quinine with ammonia or ether, have appeared to be suitable and helpful.

Antipyrin, when given, reduced the temperature one or two degrees, and sometimes relieved the headache, but it has not appeared to produce any markedly good effect upon the course or duration of the disease. Ammonia, ether, bark, quinine, or salicine, and other remedies have variably been given during the inflammatory illness, and these, or some of them, have apparently at times been of some service;

[1] Vol. i., p. 378.

whilst sulphuric ether has occasionally helped the dyspnœa. Mild terebinthinate inhalations also have somewhat comforted the nasal and throat troubles. But the most marked and the most real advantage has been derived from the free and continued use of fluid nutriment of all varieties, with champagne or other wine or brandy. Perhaps the champagne (iced or not as preferred) has been most useful as well as grateful; but brandy in considerable quantities has sometimes been given with manifest advantages, especially where the asthenic condition has been very marked.

Upon the whole, my experience is that the treatment has been most effective when conducted on the theory of our having a specific fever to deal with, and of attempting to sustain the life and to guide the patient through it, rather than from active or violent attempts to subjugate the disease or its inflammatory complications. I have not seen any of these suddenly or even distinctly successful.

Norwich.

ON THE TREATMENT OF

INTRACTABLE CIRCULAR ULCER OF THE LEG BY AMPUTATION AT THE ANKLE-JOINT,

COMBINED WITH THE TRANSPLANTATION OF THE SOFT TISSUES OF THE SOLE AND DORSUM OF THE FOOT TO THE FRONT AND BACK OF THE LEG RESPECTIVELY.

(A Supplement to a Procedure described in THE LANCET *of Nov. 28th, 1885.)*

BY C. B. KEETLEY,

SENIOR SURGEON TO THE WEST LONDON HOSPITAL.

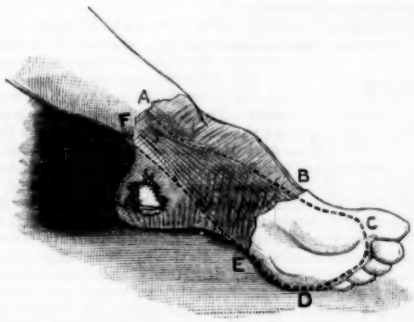
IN August, 1885, in the West London Hospital, a patient named John J——, a gardener, aged forty-six, admitted for amputation at the knee for a large intractable ulcer of the leg, was operated on in a manner afterwards described fully in THE LANCET for Nov. 28th, 1885. The ulcer having been scraped, the bones and soft tissues of the dorsum of the foot were removed and the whole of the sole of the foot, except loose tendons, but including muscles and the plantar vessels and nerves, was transferred to the site of the ulcer. A portion of the lower end of the tibia had to be removed, or the flap thus obtained would not have reached near to the upper margin of the ulcer. The patient was quite convalescent in six weeks, and exhibited at the Clinical Society in another month (Nov. 13th). I have seen him many times in the past four years. His leg remains well, and the stump is able to bear his weight. The annexed diagrams (Figs. 1 and 2) indicate roughly what was done.

FIG. 1.

FIG. 2.

On April 2nd, 1888, on a boy named Edward O'N——, aged eleven, who had been run over, and who had lost, by traumatic gangrene, all the skin of one heel and instep, while his arteria dorsalis pedis had also been crushed, the following amputation was performed. The flap A, B, C, D, E, F (Fig. 3) was cut, of which only the distal end B, C, D, E was covered with skin. The proximal part of the flap was

FIG. 3.



a long bridge of muscle, &c., without any skin on its surface, but containing the plantar vessels and nerves. This part was bent on itself, and the skin-covered part B, C, D, E was applied to the end of the refreshed surface of the tibia. The result was as good as an ordinary Syme, for which, indeed, every one mistakes it. The "bridge" of flesh formed for some time a rather unsightly lump internally and posteriorly, but it gradually dwindled and cicatrised over with the aid of skin-grafting. The case is more fully reported in the "Annals of Surgery," vol. viii., p. 441.

FIG. 4.

Now, what I wish to show is how, by means of a flap analogous in construction to that used in the last case, the skin &c. of the dorsum of the foot can be preserved in ankle-amputation for, say, complete circular ulcer of the leg. Let us assume a case roughly indicated in the diagram (Fig. 4), the shaded part being a large circular ulcer. (I have unintentionally sketched here a *right* leg, and in Figs. 5 and 6 a *left*.) All granulations and unhealthy edges having been removed, and the whole ulcer and foot thoroughly cleansed and asepticised, turn back the small skin flaps B and C (Fig. 5),

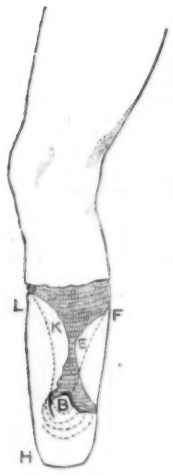
FIG. 5.

from the front of the ankle. Then cut a dorsal flap consisting of the muscles, vessels, and nerves beneath these short skin

flaps and of the whole of the skin and soft tissues (down to the bones) of the dorsum of the foot. Loose tendons may be trimmed off. There is then a dorsal flap D, G, E, F (Fig 5) with a neck uncovered by skin. By bending this neck round over the tibia above the inner malleolus, the dorsal tissues of the foot can be brought over the posterior part of the surface lately ulcerated.

The operation is completed by a procedure like that followed in the first case noticed in this paper. The final result is shown in the diagram, where G, E is the flap from the dorsum, and H, K, L the flap from the heel and sole. The dots indicate the position of the neck of the flap, cut from the dorsal aspect of the foot. In order to economise space, and also to run less risk of being misunderstood, I have endeavoured to be as brief as possible. But to ensure success in "plastic amputations" (a term which, I think, best fits those above described), there are various details to be attended to. Some of these are given at length in THE LANCET for Nov. 28th, 1885. After strict antiseptics, including absolute and scientific cleanliness, the most important point is to preserve the main arteries and nerves of the flaps. It is better not to tie any vessels; no main ones should be cut except at the extremity of the flaps. Hæmorrhage should be prevented during operation by Esmarch's bandage, afterwards by temporary pressure and elevation of the stump nearly to the perpendicular. Pressure should not be too severe or prolonged over the heel itself.

FIG. 6.



The above procedures may not be of great absolute value, but they enable a stump like a Syme to be got in cases which would otherwise be condemned to amputation at or near the knee, and they have opened up a field of surgery which, if small, is new.

Grosvenor-street, W.

A CASE OF ECTOPIC GESTATION SUCCESSFULLY TREATED BY ABDOMINAL SECTION.

BY GEORGE ELDER, M.D.,
SURGEON TO THE SAMARITAN HOSPITAL FOR WOMEN, NOTTINGHAM.

THE case which forms the subject matter of this paper illustrates one variety of misplaced pregnancy—an accident to which all women are liable during the childbearing period of their existence,—and one usually which betrays itself by symptoms so appalling and so destructive to life that not only is its prompt recognition of vital import, but also its bold and skilful surgical treatment.

At the end of last June Dr. Fletcher of Derby asked me to see with him Mrs. C——, aged thirty-three years, and who for some time had been under his care, with a slowly growing abdominal tumour. At this visit and subsequently the following history was elicited. The menstrual function was established when fifteen years of age, and was regular till some months prior to her marriage at twenty, when shortly afterwards her only child was born. The confinement was complicated by adherent placenta, and for some months after the patient suffered from metrorrhagia. The father of the child died when it was four years old, and after three years of widowhood the mother again married, some five years ago. A short time prior to the second marriage the patient was under treatment for over a month at the Cottage Hospital, Yoxall, suffering from pelvic inflammation. Her usually robust health failed somewhat from June, 1888, not so much from any alteration in her general condition as from localised pelvic pains, which materially hindered her in the discharge of her household duties. Menstruation continued to be normal until January, 1889, since when there have been irregular uterine discharges, accompanied by pseudo-labour pains. The association of morning sickness, occasional faintness, and later abdominal enlargement, induced her at the end of April or beginning of May to consult Dr. Fletcher, when he found a condition as to the true nature of which at that time it was doubtless impossible to give more than a guess, and therefore an expectant line of treatment was advised. From this time till I saw her at the end of June nearly all the period was spent in bed, and every few days the most agonising expulsive pains attacked the patient, followed by bloody vaginal discharges, collapse, and tympanitic distension of the abdomen and tenderness. Large and frequently repeated doses of opiates were absolutely necessary to combat the symptoms; and partly doubtless from this cause, but also largely owing to reflex irritation, the appetite was seriously impaired, and also the power of retaining food upon the stomach. It was at this stage that my visit occurred. The local condition was as follows: A distinct abdominal tumour presented itself, which in the middle line ran from the symphysis pubis to two inches below the umbilicus, and from the latter point on either side to the iliac bones, on the left to an inch posterior to the anterior superior spine, whilst on the right its margin was slightly higher. Except along the upper edge, where there was evidence of adherent bowel, the percussion note was dull. The tumour was fixed; its surface was somewhat irregular, and it gave one pretty much the same sensation as is experienced on manipulating a succulent myoma. Per vaginam the os uteri was found pressed up against the pubic symphysis, and the body lay in front of the tumour, slightly lengthened as to its cavity. Obliterating the posterior vaginal reflexion and encroaching considerably upon the recto-vaginal space was a soft mass, which evidently was the lowermost portion of the swelling. The breasts were flabby, not enlarged, and secreting a thin, clear fluid. The patient's general condition was not good; the recurring hæmorrhage and inflammatory attacks, coupled with systemic disturbance, had told their tale only too plainly in the blanching of the mucous membranes and the loss of flesh; so, to our advice to be removed to the Samaritan Hospital, Nottingham, with a view to relief by operation, she readily assented.

Abdominal section was performed on July 8th, in the presence of Drs. Fletcher and Littlewood of Walsall. On making the usual incision, and cutting through the much thickened and vascular peritoneum, the omentum was discovered firmly adherent to the tumour, and much increased in thickness. Tying this off in sections, a dark-purple-coloured growth was revealed, with the uterus lying upon its lower part. Breaking through its friable investment it was found that the major portion consisted of blood-clots of varying age, and amongst these was found a fœtus apparently about three months old and shreds of decidual tissue. The placenta was removed almost entire, with the attached cord, from a pouch of the broad ligament in the right side, its site having been first secured by ligature. After cleaning out the cavity (partly by the hand and partly by irrigation with plain water) the true nature of the case became manifest. A rent had taken place in the broad ligament, so that whilst the roof and the upper part of the anterior wall were invested respectively by intestinal coils and omentum, the sides and lower portion were bounded by a single layer of the broad ligament. Between the cavity and the uterus, with its appendages, this investing layer was interposed. A drainage-tube was inserted, and the parietes brought together in the usual way.

On the evening of the operation very severe uterine pains came on, resulting in the expulsion of a decidual membrane. The bowels were freely moved on the third day; the drainage-tube was taken out on the fifth, and on Aug. 3rd the patient went home well, and has remained so since. After the operation the temperature was practically normal, except on the fourteenth day, when it rose to 100·4°, owing to a little suppuration where the drainage-tube had been.

The history of this case brings out clearly what is almost uniformly observed in ectopic gestation—viz., a more or less prolonged period of sterility, frequently brought about by inflammation of the uterine appendages. The accident of an adherent placenta doubtless was the starting-point of a septic salpingitis, of which the pelvic inflammation which occurred later was merely a recrudescence. When the rupture of the broad ligament happened it is, I think, impossible to

tell. The pregnancy, I imagine, originally extra-, became intra-peritoneal by reason of its increasing growth, thinning, and finally rupturing, the inner layer of the broad ligament; and possibly the date of this coincided with the first of the attacks which the patient had towards the end of April or beginning of May. No other treatment than the surgical offered any hope to the patient, and had the "do-nothing" policy been adopted there cannot be any doubt that a fatal result would have ensued either from hæmorrhagic loss, septic trouble, or intestinal obstruction.

Note.—The fœtus &c. were shown at the November meeting of the Nottingham Medico-Chirurgical Society.

Nottingham.

NOTES ON THE ETIOLOGY OF LEPROSY.

By EDV. KAURIN, M.D.,

DIRECTOR OF THE REKNAES LEPER HOSPITAL AND CHIEF PHYSICIAN TO THE HOSPITAL FOR THE ROMSDAL DISTRICT, MOLDE, NORWAY.

(Concluded from page 188.)

CASE 14.—Elizabeth E——, peasant's daughter, aged thirty-one, was admitted to the hospital in 1887 with the anæsthetic form of leprosy. The disease has lasted about a year. No history of leprosy can be traced in her parents. For the last four or five years she has lived with a leprous brother suffering from the tubercular form, whom she and her mother nursed. She has four sisters, all healthy; but they left home at the time when their brother became diseased.

CASE 15.—Lisbet E——, peasant's daughter, aged fifty-seven, was admitted in 1888 with tubercular leprosy of six months' duration. She has lived twenty-three years in the island of Hesö, where much leprosy exists, and which has furnished us with thirty-five cases, and has also served on different farms where there are lepers.

CASE 16.—Karen B——, peasant's wife, aged forty-six, was admitted in 1888 with advanced anæsthetic leprosy of thirteen years' duration. When eight years old she left her birthplace to live in Bolsö. Here there were several lepers. Sixteen years ago she entered service along with a girl who was infected, and they shared the same bed. She also served in places where leprosy prevailed in the neighbouring farms. She was married sixteen years ago, and her husband still remains healthy. He has two healthy children by her.

CASE 17.—Peder L——, peasant, aged fifty-five, was admitted in 1888 with advanced tubercular leprosy of at least five years' duration. Has been married thirty years to a healthy wife; has five children, all healthy. Until the age of twenty he lived with his father on a little farm, which was attached to a larger one. A leper named Törris O——, who came here in 1870, lived on this latter farm, suffering from a severe tubercular ulceration. Peder kept company with this leper both at his home and elsewhere. Moreover, eight years ago he lived during the fishing season at the house of a man who had a leprous wife. They all three slept in the same bed and ate together.

CASE 18.—Lars E——, aged sixty-one, was admitted in 1888 with very advanced nervous symptoms, extended paralysis, anæsthetic patches, ulcerative spots, &c. No leprosy in the family. Disease began with the tubercular form seventeen years ago. Twenty-five years ago he married a leprous woman. Her disease, also tubercular, was discovered eighteen years ago, and soon afterwards her husband became a leper. No leprosy exists in the family on his wife's side. Of seven children one is leprous (tubercular form); he lived at home, and showed signs of leprosy between three and four years after the parents had become diseased. Seven years ago he emigrated to America, and is steadily getting worse.

CASE 19.—John J——, peasant, aged seventy-seven, was admitted in 1885 with tubercular disease of at least seven years' duration, probably much longer. No history in the family of leprosy. The wife (not related) died leprous after thirty-six years of marriage life. She had been a leper for some time before the husband perceived his own disease. They have had eleven children, out of whom two are leprous. His wife's brother was also a leper.

CASE 20.—Severin A——, peasant, aged sixty-four, was admitted in 1883 with anæsthetic leprosy of eight years' duration. He cannot trace his disease to any other cause than to having lived in company with his wife, who became leprous (anæsthetic) some time before his illness was observed. His wife's mother was also leprous. His two children, aged thirty and forty years respectively, are healthy.

CASE 21.—Marit P——, peasant's daughter, aged twenty-eight, was admitted in 1875, suffering from the nervous form of leprosy, and readmitted in 1884, with the mixed form of leprosy—that is to say, ulcerative tubercles and infiltrations, as well as large anæsthetic areas, and much muscular atrophy. Altogether the disease has lasted fifteen years. We have positive evidence that her parents are free from leprosy. The father has been married twice, the first time to a leper. Their daughter became leprous, and was admitted into the Old Reknaes Hospital in 1856, suffering from the nervous form. His second wife was a widow, who was free from leprosy, as was her husband; but their two daughters by this (the first) husband were both leprous, and were admitted here in 1867, when twenty-seven and eighteen years of age respectively, suffering from tubercular disease. The disease had lasted three and nine years respectively. Marit, the child of the second marriage, was brought up with her two leprous half-sisters until eleven years of age. In the year 1869, two years after her sisters had been admitted to the Reknaes Hospital, she observed the first signs of her leprosy.

CASE 22.—Inger Y——, a widow aged sixty-five, was admitted in 1888 with advanced anæsthetic leprosy of about fifteen years' duration. There is no history of leprosy in her family. When seventeen years of age she came to Edö, where she acted as servant to several families. When twenty-seven years old she married Andreas T——, who is said to be free from disease. They had a son and three daughters, of whom one daughter, Kristine, became a leper at the age of twenty, but the other children have remained healthy. Andreas had three leprous sisters and one leprous brother; the latter lived in Andreas' house for many years. After nineteen years of married life Andreas got drowned, and then his widow had a leprous woman named Marie K—— to live with her for about three years. Marie was admitted in 1875 suffering from the tubercular form of disease. One of the daughters (the above-mentioned Kristine) was living at home, and was, like her mother, quite well. Kristine was in the service of the leprous woman, and together with her mother nursed Marie K——. Seven years later Kristine was admitted with tubercular ulceration. When the mother had been a widow for three years, she married Ole H——, and moved to his farm in 1872. He was healthy himself, but had a leprous daughter, who stayed with them until she was admitted in 1873 with tubercular leprosy. This second marriage bore no fruit.

I now proceed to treat of the second group of cases in which leprosy can be traced along the direct family line, and then to the third group, in which the descent is doubtful, but which may be used by some physicians in support of the hereditary theory, or of "latency" in the family; but for my part I am inclined to believe that even in these latter instances contagion is the real cause.

CASE 1.—Edvard H——, sailor, aged twenty-six, was admitted in 1882 with "nervous" leprosy, accompanied by necrosis of the bones of the left foot. The grandfather, grandmother, and parents were healthy; but his uncle on the mother's side, at whose house he lived for two years before he became attacked, was a leper. He confesses to having had the disease only two years, but from other witnesses the time appears to have been at least eight years.

CASE 2.—Kristine A——, peasant's wife, aged twenty, was admitted in 1882 with tubercular disease of three years' duration. She had then been married three years. Her husband and child both healthy. Her four brothers and sisters are all healthy, as are her parents; but one brother and three of the sisters of her father are lepers. For a year and a half she had been in the service of Marie K——, a leprous woman, who was admitted here with ulcerative tubercular leprosy in 1885. She states that her disease began after her first child was born, seven years after she had left Marie K——'s service.

CASE 3.—Iver L——, aged sixteen, admitted in 1884 with tubercular leprosy of five years and a half's duration. The parents were healthy, as are his seven brothers and sisters. His mother's brother, in whose house he had lived

from his sixth to his ninth year, was leprous. He became leprous when about ten and a half years of age.

CASE 4.—Andreas P——, peasant's son, aged twenty-five, was admitted with tubercular ulceration in the infiltrative stage. The disease had lasted about a year and a half. His parents, and brothers, and sisters are all free from disease, nor is any member of the family affected except his father's brother, admitted in 1879 with tubercular ulceration of ten years' duration. During this period he had lived in his parents' house. He was always in the company of his uncle when not in service.

CASE 5.—Jens L——, peasant's son, aged twenty-two, was admitted in 1886, with tubercular ulceration of three years' duration. Parents are free from leprosy. Father died at ninety, was thrice married, and had fourteen healthy children. His mother's brother was a leper, and was admitted in 1883 with "nervous" leprosy. Several leprous persons lived near his house, and he kept company with a leper on the next farm, who was admitted the next year with tubercular leprosy.

CASE 6.—John J——,[1] aged nine, was admitted in 1886 with the tubercular form in the eruptive stage. This disease had lasted about one year. The parents and both grandfathers and grandmothers are certainly free from leprosy. His two great uncles on his mother's side were leprous. One of these lived for five years with John's parents suffering from tubercular leprosy. John generally slept with this man, but his four brothers and sisters (all free from leprosy) never did so. The parents were in great poverty.

CASE 7.—Ole P——, aged sixteen, was admitted in 1886 with anæsthetic paralysis of the face of three years' duration, together with atrophy of the facial muscles. The parents are free from leprosy. He has a brother aged ten who is healthy. He has been much in the company of lepers, and often lodged and boarded with them.

CASE 8.—Pernille O——, aged thirty, peasant's daughter, was admitted in 1889 suffering from advanced "nervous" leprosy, which had lasted fifteen years. Her parents and grandparents are all healthy, but her father's brother was a leper (admitted in 1869 with tubercles). Pernille never associated with him, but she often kept company with a leper who lived on the neighbouring farm.

CASE 9.—Ole H——, peasant, aged thirty, was admitted in 1887 with anæsthetic leprosy of eleven years' duration. No leprosy exists in any member of the family except a cousin (father's side), but he was in the habit of associating and working with a man on the farm who suffered from tubercular leprosy.

CASE 10.—Sigvart H——, aged sixteen, peasant's son, was admitted in 1888 with tubercular disease in the eruptive stage. The disease had lasted two years. His father's brother is the only member of his family who is a leper. When the patient was nine years old he was taken to the farm at Aarberg, where, according to report, there are no lepers. He was constantly in the company of his (leper) uncle, who lived near. He had eight brothers and sisters, all of whom are healthy. The uncle, Fredrik, of gipsy parents, was admitted in 1882 with anæsthetic leprosy, which had lasted for eight years. He had already been married twelve years, and had had five children, all of whom are free from disease. No history of leprosy whatever can be traced in the family, but ten years ago he states that he travelled from Finmark with a leper, with whom he was wont to sleep on the journey.

CASE 11.—Olsen K——,[2] peasant's son, aged twenty-six, was admitted in 1888 with tubercular leprosy, of which he was unconscious, but which must have existed at least two or three years. His mother became a leper in 1865, when he was three years old, and was admitted here in 1874 suffering from advanced tubercular ulceration. When two years old he was adopted by a neighbouring farmer, living with him until 1884. He then entered the service of a country gentleman, where, however, there was no trace of leprosy. Close by the farmer's house there lived a leper, with whom the farmer's wife constantly kept company. This man became leprous in 1867, and was admitted here in 1875 with tubercular leprosy, although his family are free from disease. His father and the latter's brother and sister all rapidly became affected with tubercular disease. When living with the farmer, the patient, Olsen K——, mixed freely with his foster-mother and the above-mentioned lepers, and grew up among them. In 1885 he was rejected from military service on account of a wound on the right big toe, which he supposed to have been due to frost-bite.

[1] This case appeared in the Tidsski f. Prak. Med., 1886, No. 23, translated in the Annales de Dermatologie et de Syphilographie, vol. viii., No. 2, 1887; and also in the Report on the Etiology of Leprosy, published by the California State Medical Society, 1887, p. 14.

[2] This case does not belong to this group, as the mother was leprous, but it has been added as it throws light on the subject of contagion.

A SECOND SERIES OF CASES TREATED BY SUSPENSION AT THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, QUEEN SQUARE.

BY J. S. RISIEN RUSSELL, M.B.,
AND
JAMES TAYLOR, M.A., M.B.

BY permission of the physicians who have had the various patients under their care, we are able to publish a second series of cases treated by suspension at the National Hospital for the Paralysed and Epileptic, Queen-square. The treatment has been carried out in the majority of the cases exactly as described in our last paper, suspension being done every other day with the feet well off the ground; the duration at the commencement of treatment was half a minute, gradually increased until a maximum of four minutes was reached, and the weight of the body during suspension was thrown more and more on the neck, as the patient learnt to dispense with the axillary supports. As it has been asserted, however, by some who have written on suspension that better results are obtained with shorter but more frequent *séances*, in a number of cases—viz., twelve to nineteen inclusive—the treatment was carried out daily with a maximum duration of three minutes. As the table shows, the results were not notably different from those obtained with suspension on alternate days with a maximum duration of four minutes. In all cases the patients were directed to rest immediately after suspension. In the case of out-patients this could only consist of a few minutes' rest before going home. In the case of patients resident in hospital, however, each one had to lie down for at least half an hour after suspension. The same course was pursued in the cases published in our previous paper. As to other treatment received by patients who were undergoing suspension, this was in most cases of the nature of a *placebo*. A few who got attacks of pain had an occasional dose of antipyrin or antifebrin, while one or two who slept badly had from twenty to thirty grains of bromide of potassium or sulphonal at bedtime. There is no accident to record in connexion with the treatment, not even the occasional faintness which occurred in some of the former cases. One or two complained of pain in the jaws, one or two of pain at the bottom of the back, and a similar number of pain at the back of the neck. One of those (Case 17) who complained of the last symptom had along with it one evening more than usual discomfort and a rigor; but as he was suffering from cystitis and returned to his usual condition next day, the rigor is most probably to be ascribed to the bladder trouble. In only one of the cases of tabes (Case 15) can we say there was real improvement. This patient on admission could only get about by catching hold of something; but after a dozen suspensions he was able to walk, with very great unsteadiness it is true, alone, and even without a stick. Towards the end of his period of treatment, however, he unfortunately became worse again, and was very shaky, unable to walk more than a step or two without support. He was in this condition when he left the hospital a fortnight after suspension was stopped. In the other cases of tabes no definite improvement can be recorded. Most of them confessed to "feeling better," but in what this actually consisted it is difficult to say. A few said they thought they could walk a little better, but in none of them was there any objective sign of improvement in this respect to several different observers. In none of the cases where optic atrophy was present was there any improvement in vision, and in the organic signs generally no change can be recorded.

CASE 10 is that of a patient with well-marked ataxic gait, pain at the bottom of the back, pains in the legs, loss

of knee-jerk, and normal pupils. He had nine suspensions, after which he had an attack of great pain in the back, where the former pain was, and on returning (he was an out-patient) a week later his walking was manifestly worse. He had another suspension, and then he got an attack of erysipelas of the face, which completely interrupted the treatment, even if it would have been considered justifiable to persevere with it.

Another patient (Case 18) had a severe gastric crisis last-

him there was little if any improvement apparent, and his signs remained as before treatment. The patient with paralysis agitans certainly had less tremor when seen at hospital—indeed, on the last two occasions on which he was seen "no tremor present" is the note made. He said, however, that he did have it occasionally—he was an out-patient—and his face and gait, and the appearances generally characteristic of the disease remained unchanged.

With reference to the last two cases in the list they are

TWENTY-ONE CASES TREATED BY SUSPENSION.

No.	Name and age.	Physician's name.	Disease.	Prominent symptoms.	Duration of disease.	No. of suspensions.	Results.
1	A. B., aged 23.	Dr. Hughlings Jackson.	Tabes dorsalis.	Great incoördination of legs; inability to walk; paresis of right third nerve; diplopia; cystitis and incontinence; loss of pupil reflex to light.	3½ years.	33	Slightly less ataxic, but quite unable to walk alone. Other symptoms unchanged.
2	C. D., aged 32.	Dr. Hughlings Jackson.	Ditto.	Ataxic gait; slight incoördination of hands; pupil reactions normal; slight pains.	5 years.	32	No change.
3	C. F., aged 46.	Dr. Buzzard.	Ditto.	Inability even to stand; no pain; Argyll-Robertson pupils; abdominal distension.	15 months.	44	Abdominal distension less. Otherwise no change.
4	G. H., aged 54.	Dr. Buzzard.	Ditto.	Extreme ataxy in legs and arms; inability to walk; double optic atrophy; cystitis and incontinence of urine.	3 years.	20	No change.
5	J. K., aged 43.	Dr. Ferrier.	Ditto.	Ataxic gait; Argyll-Robertson pupils; lightning pains; tendency to retention.	10 years.	20	No change.
6	L. M., aged 36.	Dr. Beevor.	Ditto.	Pains; ataxic walk; tendency to retention; Argyll-Robertson pupils; one gastric crisis.	2 years.	25	Thinks he walks a little better. No change apparent.
7	P. N., aged 56.	Dr. Beevor.	Ditto.	Difficulty in walking; pains at bottom of back; Argyll Robertson pupils.	2 years.	32	No change.
8	O. P., aged 38.	Dr. Beevor.	Ditto.	Complete blindness from optic atrophy; occasional pains.	17 years.	15	No change.
9	R. S., aged 32.	Dr. Anderson.	Ditto.	Unequal pupils; right acts to light, left does not; neither acts definitely on accommodation; discs normal; vision—right, Jaeger, 5½; left, Jaeger, 2; gait normal; pains slight.	1 year.	20	No change.
10	T. W., aged 52.	Dr. Anderson.	Ditto.	Difficulty in walking; pains in back; pupils normal.	1½ years.	10	Distinctly worse.
11	W. S., aged 34.	Dr. Beevor.	Ataxic paraplegia.	Stiffness in legs; increased knee-jerk; slight ataxy and difficulty in standing; tendency to incontinence of urine.	1 year.	25	Considers himself better; symptoms and signs remain unchanged.
12	S. T., aged 25.	Dr Ferrier.	Disseminated sclerosis.	Excessive tremor, increased on movement; nystagmus; sphincters unaffected.	8 years.	21	No change.
13	R. T., aged 53.	Dr. Anderson.	Paralysis agitans.	Mask-like face; rigid neck; festinant gait; slight tremor right and left.	3½ years.	30	Improved.
14	R. B., aged 43.	Dr. Buzzard.	Tabes dorsalis.	Paralysis left third nerve; paresis right third; anæsthesia of face; paralysis left pterygoids; slight affection of facial; paralysis of left vocal cord; occasional incontinence of urine; pains.	4 years.	32	No change.
15	C. H., aged 44.	Dr. Buzzard.	Ditto.	Marked ataxy; Argyll-Robertson pupils; occasional pains; no crises.	4 years.	31	Improved considerably in ability to walk, but relapsed in the last week of treatment.
16	R. L., aged 40.	Dr. Buzzard.	Ditto.	Ataxic gait; difficulty in standing; Argyll-Robertson pupils; no pains.	7 years.	30	No change.
17	H. S., aged 52.	Dr. Bastian.	Ditto.	Extreme ataxy; pain in back; lightning pains; cystitis and incontinence; normal pupils.	4 months.	30	No change.
18	D. C., aged 31.	Dr. Beevor.	Ditto.	Extreme ataxy of legs and arms; Argyll-Robertson pupils; gastric crises; cystitis and incontinence.	2½ years.	20	No change.
19	D. A., aged 30.	Dr. Ferrier.	Ditto.	Optic atrophy; lightning pains; vision—right eye distinguishes object, not form; left eye $\frac{1}{60}$; Jaeger 16.	2 years.	30	No change.
20	B. S., aged 38.	Dr. Hughlings Jackson.	Ditto.	Marked ataxy; occasional lightning pains.	2 years.	50	Improved until he had 30 suspensions. After that remained stationary. Reported in last series.
21	E. L., aged 49.	Dr. Hughlings Jackson.	Ditto.	Ataxy (slight), Argyll-Robertson pupils; incontinence; diarrhœa; sickness.	4 years.	21	Reported in last series as having had 12 suspensions. He became an in-patient; treatment was continued, but without improvement.

ing over a fortnight, which necessitated the discontinuance of the treatment during that period.

Of the other cases recorded here—one of disseminated sclerosis, one of ataxic paraplegia, with optic atrophy, and one of paralysis agitans—the first had suspension daily for three minutes, and so had the last. The second one had it on alternate days also for three minutes. In the first case the treatment was only carried out with great difficulty, so violent was the tremor, and after twenty-one suspensions his condition was unchanged. The patient with ataxic paraplegia considered himself better, but to those who saw

both recorded in our last series, the one (Case 20, Case 11 in the former list) as having improved with thirty suspensions. The treatment was continued until he had had in all fifty suspensions, and while it cannot be said that he improved after the thirtieth, yet the improvement that had already taken place was maintained. The other patient (Case 21, Case 4 in the last paper) was taken into hospital after having had twelve suspensions as an out-patient. The treatment was continued until he had had in all twenty-one suspensions without any improvement. He died a few weeks later of acute pneumonia.

ON A CASE OF MEDIASTINAL TUMOUR.

BY JAMES M. WILLIAMSON, M.D. ED.

THE following notes afford a good example of the course and progress of a case of mediastinal tumour, and they illustrate, perhaps better than usual, how closely the collective signs at a certain stage in such a case may resemble those of thoracic aneurysm.

Mrs. B——, aged thirty-two, came under treatment on Jan. 31st, 1888, complaining of cough and shortness of breath, with general languor and depression. These symptoms had begun about eleven months previously, at which time her health was suffering much from business anxieties and hard work, late into the night, as a sempstress. The patient was not badly nourished, but her facial expression was anxious, and the capillaries were distended over both cheeks. The skin was rather dusky, but free from œdema, eruptions, or cicatrices, and no tumour or enlarged glands were discovered. Her conversation was carried on in a high-pitched voice that was free from huskiness, and her sentences were short and gasping, the respiration being greatly hurried by very slight exertion. The cough was a frequent one, peculiarly violent and ringing, and yielding only scanty grey mucus. The tongue was thinly coated, the appetite poor, the bowels irregular, and flatulence was a constant source of complaint. Nothing abnormal was to be found in the urine, and the menses were regular. Pain of any sort was altogether absent. The pulse was 80, small, regular, equal in the two radials, and the temperature in the afternoon was normal. On examining the chest marked dulness was found on the left side; in front, down to the third rib; behind, over the supra-scapular and scapular region; and over this dull area vocal resonance was relatively lessened, respiration was distant and slightly tubular, and there were no moist sounds. Elsewhere the lungs were normal. The cardiac sounds were feeble, but free from bruit.

A week after the above note (on Feb. 7th) the patient awoke in the morning to find her left arm swollen. It proved on inspection that the whole of the left upper extremity was livid and œdematous and slightly colder than its fellow. The veins were visibly distended, and pulsation in the left radial and brachial arteries was only just perceptible. No enlarged glands could be discovered in the axilla or the root of the neck. The face had become turgid, but the pupils remained natural and equal. There was no fever, nor was there any material change in the physical signs in the chest. Ten days afterwards (Feb. 18th) the swelling in the left arm had partially subsided, but the left supra-clavicular region was more swollen, the left external jugular vein being very prominent. Pulsation in the left subclavian artery was only made out with difficulty, but that of both common carotids was equal and regular, though feeble. A further search revealed no enlarged glands. From this date matters went on more slowly, and on March 7th the following notes were made: Face dusky, eyelids œdematous, not pale, conjunctivæ suffused, pupils normal and equal. Both external jugular veins much distended, especially the right; superficial veins of the cheeks prominent. The left arm and shoulder were less swollen, but the left radial and brachial pulses could hardly be felt. Dyspnœa with stridulous breathing almost amounted to orthopnœa. The cough continued hard, irritative, clanging, the expectoration merely a little grey mucus. The voice approached the vox anserina. Pain was still absent. The right chest was found hyper-resonant, respiration over it being harsh, almost tubular at the apex, with occasional coarse rhonchus in the interscapular region. On the left side the percussion note was quite dull over the upper half, back and front, the dulness extending to the right of the middle line; and over this region vocal fremitus and vocal resonance were almost entirely absent and respiration distant, of somewhat tubular character, and without accompaniments. Over the lower half of the left lung, beyond the percussion being less dull, the physical signs were almost exactly the same as in the upper half. The heart's impulse was diffused, and although a certain amount of vibration was conveyed to the hand laid over the upper sternum, there was no decided pulsation over the dull area; the heart's apex was difficult to locate, and for the first time a distinct though soft systolic bruit was heard over the aortic valves. From this period the symptoms rapidly increased in severity. The whole of the left breast and the infra-axillary region became swollen, the cutaneous veins standing out turgid, and the venous radicles tortuous and dilated. The dyspnœa continued unabated and increased, and some dysphagia was noted. By March 14th the face had become very dusky and anxious, and distinct orthopnœa was present, with great sleeplessness. The left pupil was found widely dilated. The manubrium and the ensiform cartilage with the adjacent right costal cartilages had become pushed forwards and slightly outwards. Dysphagia increased. On March 18th the whole of the upper half of the body, with the head and neck, was turgid and cyanotic, the dyspnœa was extreme and strangulating, and articulation was very difficult, the whole condition being pitiful and most distressing. Death from asphyxia relieved this poor creature on March 20th.

With the help of Mr. J. Hoole, who assisted me in attending the case throughout, a post-mortem examination was made twenty-three hours after death. The body was fairly nourished, rigor mortis well marked. There was great lividity of the back of the body, and of the neck, ears, and face, and the lips were cyanosed. The entire left arm was œdematous. On opening the thorax the pleural cavities were found full of clear serous fluid. On raising the sternum a lobulated, heart-shaped tumour was exposed, looking like masses of sweetbread, and adherent to the left lung and the pericardium. It occupied the upper half of the anterior mediastinum, infiltrated the middle, and extended back into the posterior. In front it reached down to the fourth rib. The growth was wedged in behind the heart, pushing it forwards and slightly to the right; and a portion, like a tongue, overlapped and pressed upon the ascending aorta. The left lung was collapsed and retracted, its anterior border being crushed outwards till it lay parallel with the outer border of the mammary region; and portions cut from this lung sank in water. The right lung was free from adhesions, slightly emphysematous, and floated in water. The heart and aorta were normal and the thorax otherwise free from disease. No abnormality was noted in the body elsewhere. A section of the tumour was very kindly examined for me by Mr. Anthony A. Bowlby, surgical registrar of St. Bartholomew's Hospital, and found by him to be a typical lympho-sarcoma.

Ventnor, Isle of Wight.

ON ATRESIA OF THE VAGINA; ITS PATHOLOGY AND TREATMENT.

BY THOMAS MORE MADDEN, M.D., F.R.C.S.ED.,
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THE subject of vaginal malformation or occlusion, as a cause of sterility and marital troubles as well as of menstrual disorders, is one the practical importance of which is evident. Nevertheless, if in current medical literature be rightly reflected the prevailing tendencies of modern gynæcological opinion, it would seem that whilst so much attention is devoted all to utero-ovarian and tubal affections, the study of abnormalities of that passage, on the integrity of which the due performance of woman's sexual functions essentially depends, is now somewhat unduly neglected. The following observations are therefore submitted, in the hope of inducing more adequate consideration of some of those abnormal conditions of the vagina which are of unquestionable interest from the special difficulties connected with their successful treatment.

In the first volume of the Transactions of the Academy of Medicine may be found a short communication of mine on the subject of "Cicatricial Occlusion of the Vagina," and in a later volume I described certain other morbid conditions by which, whilst the structural integrity of this passage remains intact, its functional uses in relation to marital life and impregnation were impaired or destroyed. On the present occasion I purpose to consider that fortunately rare, but graver, congenital malformation that is occasionally presented in cases of entire or partial absence of the vagina, by which the patient is not merely incapacitated for marital life, but is also subjected to great physical suffering and danger. This subject was frequently referred to by the

older writers:—"One of the most remarkable instances of nature's wanderings from her accustomed laws," observed Dr. Davis,[1] "is that which consists in the entire absence of the vagina. Cases of this defective formation are not numerous, but they are sufficiently numerous to establish the fact of their existence. Most frequently they are found combined with absence of the uterus, as also with that of one or more of its appendages." When in those cases there has been any passage at all, it but rarely exceeded an inch or an inch and a half in length, and has usually terminated in a cul-de-sac.[2] Of this variety of defective development was the case of a porter's wife, related by Morgagni,[3] in which the external parts of generation were very diminutive, and there was scarcely to be seen a trace of hymen. The entry into the vagina did not equal the dimensions of the middle finger in any direction; the breadth of the vagina when opened longitudinally and displayed was scarcely more than two fingers, and there were no rugæ on it. The parietes of the uterus were extremely thin, and the entire organ appeared not to have acquired any increment of bulk since the birth of its subject. There were no ovaries, a deficiency to which may reasonably be ascribed the imperfect development of the vagina and uterus.

Dr. Blundell, who in many instances, though not in this, was far in advance of the gynæcological knowledge of his day, shared in the ancient doctrine as to the usual absence of uterus and general inadmissibility of any reparative treatment in these cases, and says: "When the closure above [of the vagina] is not partial, but reaches throughout the whole extent of the genital passage, the case scarcely admits of a remedy, nor, indeed, will the catamenia form." Many years later the same view was supported by a surgeon to whom modern gynæcology owes much of its development—viz., the late Dr. Marion Sims, who says: "I have seen five cases of congenital absence of the vagina, and in all of them there was no uterus."[4] Dr. Macnaughton Jones observes: "If the vagina is congenitally absent, there is often no uterus as well."[5]

Dr. Bousquet[6] of Marseilles not long since recorded a case of this kind in the Gynæcological Transactions, and in the recent American Cyclopædia of Gynæcology[7] we find the old opinion on this point still sustained: "The whole canal may be absent, a condition which is commonly combined with absence of the uterus, but in other cases a normal uterus is found conjoined with the closed vagina."

The doctrine supported by all the authorities just cited would point to the general inadmissibility of reparative treatment in such cases. Fortunately, however, this often reiterated view is not correct as a general rule. Since the celebrated case reported more than fifty years ago by Amussat,[8] of successful formation of artificial vagina, several others of the same kind have been from time to time reported in disproof of former views concerning the necessary connexion between utero-ovarian and vaginal developmental lesions, and the impossibility of reparative treatment in the latter. Even yet, however, the number of such cases successfully treated is by no means very large, and hence it may be of interest to record here three additional cases, illustrating the treatment of congenital absence of the vagina. The most recent of these occurred a few weeks ago in my clinique in the Mater Misericordiæ Hospital, where the patient was admitted under the care of the senior surgeon, Mr. Hayes, by whose kindness she was subsequently, on his examination and diagnosis of the nature of the case, transferred to my wards.

The subjoined notes are supplied by my clinical resident, Mr. T. G. Dillon, to whose unremitting attention the fortunate issue of the case is largely due.

CASE 1.—M. G——, aged seventeen, a tenant farmer's daughter, living near Ballyhaunis, county Roscommon, was admitted to hospital on Aug. 16th, 1889. She had never menstruated, and complained of constant pain in her back for the past three years, and on palpation a swelling as large as the fœtal head at full term before her admission had been discovered in the region of the uterus. This felt hard and movable, and was diagnosed to be a uterine tumour. At a certain period each month this swelling grew larger, and the pain in her back became more severe for a few days, when both gradually subsided. The mammæ and external genital structures were well developed. On Nov. 3rd a minute recto-abdominal examination of the case, under chloroform, was made by Dr. More Madden, to whose ward the case had been transferred, with the result that he discovered there was complete atresia vaginæ, from a quarter of an inch below the opening of the urethra. He decided on operating for the defect, which he did, assisted by Dr. Duke, on Nov. 7th. The patient being placed in lithotomy position, a transverse incision was made through the vulval cul-de-sac, and thence continued upwards and backwards in what should have been the axis of the vagina by breaking through with the handle of a scalpel and point of the operator's finger the dense cellular interspace between the bladder and rectum, the position and integrity of which were carefully observed and guarded by the use of the sound in the former and the retention of his left index-finger in the latter. In this way a passage nearly six inches in length was cautiously made to the uterus. This being globular, and no trace of the cervix or os tincæ being apparent, an incision was then made with a bistoury into the most prominent and accessible part of the uterus, through which a catheter was passed into the cavity, giving exit to about forty ounces of dark-coloured tarry blood, which on examination proved to be menstrual fluid; at the same time, the tumour in the abdomen began to grow smaller, and on pressing over the region of the uterus the discharge came away more quickly, which showed the tumour to be nothing else than a hæmometra, or collection of retained menstrual fluid, which had been pent-up in the uterine cavity. The uterus was then carefully washed out with an antiseptic solution, a drainage-tube was introduced into the uterus, and the new vagina plugged first with iodoform gauze, and subsequently with lint and cotton-wool soaked in glycerine of borax. The plug was removed and a fresh one put in twice daily, the uterus and vagina being douched at the same time through the drainage-tube, until the walls of the new vagina had healed over and the temperature fell to normal. On the day after operation her temperature rose to 104°, her pulse was 140, and, though there was no evidence of metro-peritonitis at any time, for some days her life hung in the balance, the symptoms pointing to septicæmia. After the first week the main difficulty consisted in overcoming by repeated dilatation the great tendency to contraction of the new vagina. Ten days after operation a quantity of blood, similar in appearance to the catamenial discharge, was passed through the drainage-tube. The patient is now apparently quite well, and has a vaginal passage which easily admits two fingers. On Dec. 7th normal menstruation occurred.

For the particulars of the following interesting instance of congenital deficiency of the vagina I am indebted to my colleague, Mr. Coppinger, surgeon to the Mater Misericordiæ Hospital, by whom it was successfully operated on.

CASE 2.—H. K——, a thin, delicate-looking, and poorly-developed girl of eighteen, was admitted under my care into the surgical ward of the Mater Misericordiæ Hospital, May 10th, 1889, complaining of pain in the back, and of a tumour which was supposed to represent a psoas abscess. A superficial examination and inquiry into the history of the case sufficed, however, to prove that the tumour, which was about the size of an infant's head, and occupied the hypogastric and left lumbar regions, was not an abscess, but a collection of retained menstrual secretion. An examination was now made under ether, when the fact that there was complete absence of the vaginal orifice, and apparently of the vagina, was elicited. On May 26th the patient was placed in the lithotomy position, and, with a finger introduced into the rectum and a metal male catheter, held by my house-surgeon, Dr. W. A. Morris, in the bladder, an incision was made in the middle line from about half an inch below the urethral orifice downwards for about an inch towards the anus. The recto-vesical septum was quite thin, and great care was necessary in order to avoid wounding the mucous membrane of the rectum on the one hand, or that of the bladder on the other. The two membranes were ultimately separated for about three inches before some loose areolar tissue was reached, and this was tunnelled with the finger until the abdominal tumour on its pelvic aspect could be felt. On pressing the latter from the front of the abdominal wall downwards, fluctuation could now be appreciated. Nothing resembling

[1] Obstetric Medicine, vol. i., p. 24. London, 1826.
[2] Baudelocque's Midwifery, translated by Heath, vol. i., p. 215.
[3] De Sedibus et Causis Morborum, Epist. 46, Art. xxi. Venice, 1760.
[4] Uterine Surgery, p. 349. London, 1886.
[5] Diseases of Women, third edition, p. 418. London, 1888.
[6] Transactions of the British Gynæcological Society. Vol. i., p. 218. London, 1886.
[7] Vol. i., p. 258. New York, 1887.
[8] Gazette Médicale, Dec. 1835, p. 785.

an os uteri could, however, be discovered, so a trocar was thrust upwards in the middle line into the centre of the tumour. No fluid at first appeared, but, on passing a large aspirating cannula along the same channel and pumping vigorously, some semi-fluid substance, jet black, and resembling tar in consistence and appearance, was evacuated. The cannula was now removed, the opening widely dilated by means of my cervical dilator, and a quantity of weak, corrosive sublimate fluid passed into the cavity by means of an irrigator. In this way about a quart of tarry fluid was gradually evacuated, a drainage-tube was introduced through the new vaginal tube and new os into the cavity of the uterus, and the patient, after an operation which occupied more than an hour, sent back to her ward. There was no subsequent rise of temperature, but great difficulty was experienced in keeping open the new vaginal tube. With this object the patient was repeatedly etherised, drainage-tubes of various descriptions being used. Indeed, but for the care and attention of my late house surgeon, Dr. Morris, the operation would, I believe, have failed in its ultimate object. In the end, however, normal menstruation was established, and the girl left the hospital cured. I may mention that I heard from the country on Dec. 17th that she was in good health.

Dr. Duke, gynæcologist to Steevens' Hospital, has kindly furnished me with the notes of another case, under his care, also illustrating the successful treatment of this condition:—

CASE 3.—"M. C—— was brought to me at the Rotunda Hospital by her mother, who informed me that she had never menstruated. As she was only seventeen years of age I adopted the usual routine treatment—hot baths, iron, and aloes, &c.; but finding it of no use I made an examination, and could find no trace of the vagina; there was a dimple only where the orifice should be. The patient being poor, I had no assistance with the operation but her own mother, who, being a sensible women, did as she was told. I administered ether, tied the patient up, and, having previously determined by the finger in the rectum and a sound in the bladder that a uterus existed, I worked my way with the finger and scalpel up to the cervix uteri, which was elongated and with the characteristic pinhole, as on making pressure over the uterus menstrual blood exuded, but only in small quantity; I plugged the newly made canal with wadding soaked in glycerine and carbolic acid, and after a few days inserted a glass plug. The patient menstruated naturally while the glass plug was being worn, so I removed it, and I heard the girl got good health, till I lost sight of her, as she went to some part of the country with her relatives."

(To be concluded.)

TREATMENT OF DIPHTHERIA.

ILLUSTRATED BY CASES.

BY R. W. SUTTON BARRACLOUGH, M.D., L.R.C.P.

(Concluded from p. 191.)

I WILL now proceed to give a short account of a series of consecutive cases of diphtheria occurring under my own observation, by way of practically illustrating the foregoing remarks. They are fourteen in number, and of these, eleven were under my own care, the remaining three being cases to which I was called in consultation. They all occurred within a period of twelve months in 1887 and 1888, and in two of the latter I performed tracheotomy. In the eleven cases under my own care the local treatment which I have described was strictly carried out. In three of these cases the disease extended to the nasal cavities, but in not one instance did it extend to the larynx. In one case paralysis of the muscles of the palate, pharynx, and tongue occurred during convalescence, causing fluids to pass through the nose during deglutition, and affecting also the speech. In another case there was albuminuria. The whole of these cases were of a severe type, but they all completely recovered. With regard to the three cases which I saw in consultation, in two of these no local treatment had been adopted, and in the remaining one, although sulphurous acid spray had been used, it was soon abandoned, in consequence of the difficulty of applying it. In each instance the disease spread to the larynx, and the three patients died.

CASE 1.—M. D——, aged twenty-eight years. Both tonsils covered with diphtheritic exudation. Liquor ferri perchloridi fortior applied several times in the twenty-four hours, and chlorinated soda spray used every half hour. No extensions. Patient convalescent in nine days.

CASE 2.—C. B——, aged six years. Both tonsils affected. The local treatment, as described, was carried out. The disease extended to the nasal cavities, which were thoroughly syringed out with perchloride solution. In this case paralysis of the palate, pharynx, and tongue occurred during convalescence. Quinine, strychnine, and iron were given, and the child completely recovered. There was no extension to the larynx.

CASE 3.—G. B——, aged eight years, brother of the above. Both tonsils were affected. This child had been isolated from his brother out of the house for six weeks, and unfortunately returned home without my sanction, and so contracted the disease. The local treatment was adopted, and he made a speedy and complete recovery. There was no extension to the larynx. In this case I have no doubt that the outbreak of the disease was attributable to the existence of an old cesspool under the scullery floor, which was full of filth.

CASE 4.—D. M——, aged five years. Both tonsils and soft palate were extensively covered with diphtheritic membrane. The local treatment was at once adopted, and the tough pultaceous membrane soon showed signs of becoming detached, coming away in large pieces, leaving a healthy, easily bleeding, ulcerated surface. The application of the iron solution was continued for some days longer, as also the chloride of soda spray. The disease extended to the nasal cavities, and quantities of false membrane and offensive muco-purulent matter were brought away by syringing with the iron solution, the smell from the nostrils being most offensive. There was slight albuminuria on the tenth day, but it entirely disappeared on the fourteenth. There was no extension to the larynx, and the child completely recovered. I would here mention that this case, together with the following five cases, constituted a family of six children, and that the five unaffected ones were sent away from home within an hour of my seeing the case. They were also under my immediate inspection for a fortnight. Showing no symptoms of the disease, they were sent into the country to a very healthy locality situated amongst the Surrey hills.

CASE 5.—A. M——, aged three years and six months, brother of the last-mentioned patient. He had been, as I have said, removed to the country with the other four, and had been separated ten weeks from his sister, who was first affected. His sister then joined them in the country, and a fortnight afterwards the disease attacked him. I need scarcely say that rigid disinfection had been carried out in the case of the sister; and that she wore no article of clothing which she had worn during the disease, they having all been burnt. The house in the country where this case occurred was a comparatively new one, and had been recently thoroughly redrained. Strangely enough, several cases of diphtheria, I was given to understand, had recently occurred in the neighbourhood. Now the question arose, Was the disease in this case contracted in the locality, or did it arise from coming into contact with the sister, even after a period of seven or eight weeks after convalescence? I am inclined to adopt the latter view, and think in all probability that the secretions of the mucous membranes of the sister were still infectious, and that perhaps the germs of the disease were exhaled by the breath. In this case the child was removed home, and the local treatment carried out. Both tonsils, soft palate, and uvula were affected. The temperature in this case fell on the day after commencing treatment from 103·4° to 98·4°, and the pulse from 150 to 96. On the evening of the fourth day the temperature was 97°, but had risen next morning to 102·4°, with a pulse of 164. On the next day the temperature fell to 98·4°, and on the seventh day to 97°, and then remained subnormal, with one slight exception, to convalescence. Large pieces of membrane became detached, and were vomited when the solution was applied. Albuminuria occurred on the eighth day, and continued till the sixteenth day, when it disappeared. There was no extension to the larynx, and recovery was complete.

CASE 6.—W. M——, aged seven years, brother of the last patient. The symptoms commenced three days after their appearance in the former case. Both tonsils were affected. Local treatment was at once commenced. Portions of membrane became detached and were vomited. The throat

cleared rapidly; the temperature fell to 98·2° on the sixth day, having started at 102·4°, and then remained subnormal during convalescence. There was no extension to the larynx, and the child completely recovered.

CASE 7.—H. M——, aged two years and six months, one of the same family. The symptoms commenced six days after the former case. Both tonsils, soft palate, and uvula were affected. Temperature 102·4°. Local treatment at once commenced. Temperature on the third day 98°, and then was subnormal during convalescence. Large portions of membrane were detached and vomited. There was no extension to the larynx. Recovery complete and rapid.

CASE 8.—D. M——, aged eight years and a half, another of the same family. The symptoms commenced on the same day as the former case. Both tonsils were affected. Temperature on the first day was 99·4°. The local treatment was carried out. The temperature never rose, and from the third day was subnormal throughout convalescence, which was very rapid. There was no extension to the larynx. This case was the least severe of the six.

CASE 9.—L. M——, aged five years. This is the sixth and last case in this family. The symptoms commenced nine days after the commencement of the previous case. Both tonsils, palate, and uvula were affected. The local treatment was adopted. The temperature was very vacillating during the first four days of the disease, but became normal on the fifth day, and then remained subnormal during convalescence. Large portions of membrane were detached and vomited. There was no extension to the larynx, and recovery was complete. Seeing that five of the three children were suffering from the disease at the same time, one might reasonably have supposed that the morbid poison would have become very powerful, and that some one or other of the cases might have turned out badly. That such would have been the case, I verily believe, had not local treatment and disinfection been thoroughly carried out.

CASE 10.—A. M——, aged six years, a delicate strumous girl, who suffered from hypertrophy of the tonsils and enlargement of the cervical glands. When first seen both tonsils were completely covered with diphtheritic exudation, and the fetor of the breath was most offensive. Local treatment was commenced at once. The temperature in this case never rose above 100·6°. Large pieces of membrane became detached and were vomited. The throat rapidly cleaned up, leaving healthy red ulcerated surfaces. The disease extended very severely to both nostrils. They were thoroughly flushed with the perchloride, and immense masses of false membrane were brought away of a most fetid odour. I had literally to pull them gently from the nostrils like worms; this condition continued more or less for some days, then leaving a muco-purulent discharge for some time longer. There was no extension to the larynx. The child was left very weak and anæmic, but eventually made a complete recovery.

CASE 11.—C. M——, aged one year and nine months, brother of the last case. The symptoms did not appear until four months after the former case. Left tonsil only affected. Local treatment at once adopted. Next day there was slight deposit on the other tonsil; both, however, were perfectly clean on the evening of the third day. The temperature never rose above 99°, and on the sixth day became subnormal. There was no extension to the larynx, and recovery was complete.

I will now briefly allude to the remaining three cases to which I was called in consultation.

CASE 1.—A. N——, aged eleven. I saw him on the ninth day of the disease. The whole of the fauces and back of the pharynx were covered with false membrane of a dark ashy-yellow colour, and the parts were sloughing in places. No local treatment had been carried out. The poor lad was completely poisoned by the disease. I ordered his removal to the hospital, where he died two or three days afterwards.

CASE 2.—E. M——, aged seven years. I saw her about the seventh day of the disease. The whole of the fauces were covered with diphtheritic membrane, and the disease had extended to the larynx. The respiration was considerably impeded, and the child was in a most critical state. No local treatment had, I believe, been adopted beyond external poulticing. I advised the performance of tracheotomy with as little delay as possible. While the necessary preparations were being made, I at once carried her to the table prepared, and performed tracheotomy. The breathing had almost ceased, being spasmodic, but the heart was pulsating. I removed a perfect membranous cast from the trachea about an inch and a half long. The heart still continuing to beat, I endeavoured to inflate the lungs from my mouth by a catheter passed through the cannula, but without success. Artificial respiration was then resorted to for about twenty minutes, but also without success, the pulsations of the heart having gradually ceased.

CASE 3.—L. L——, aged seven. I was summoned by telegram to the borders of Wales to see this child. Within eight hours and a half I stood by her bedside. She had been suffering from diphtheria five days, and there were symptoms of the larynx becoming involved. Both tonsils were affected. Sulphurous acid spray had been attempted to be used, but had not been persevered with in consequence of the resistance of the child. I applied the perchloride of iron solution, and repeated it at intervals, and the chloride of soda spray was frequently used. I sat up with her all night, and symptoms of impeded respiration becoming evident in the morning, I determined to perform tracheotomy if, after having given an emetic, no relief should be afforded. The emetic did not relieve the respiration, and feeling certain that to wait until the symptoms should become more urgent would be dangerous, I performed tracheotomy under chloroform. The breathing instantly became relieved, the child was put to bed under the usual conditions, and had some refreshing sleep. She was so much relieved that the same evening she requested to be allowed to sponge her own face. She took nourishment well, and the respiration continued quite easy. Unfortunately, however, at about 4 A.M. the following morning, whilst being fed, milk was seen to trickle through the cannula, showing that there was paralysis of the pharyngeal muscles and imperfect action of the epiglottis, thus allowing the milk to pass into the larynx. From this time she was fed by a stomach tube, but became gradually weaker, and died quietly from the paralysis extending and interfering with the action of the heart, having lived twenty-eight hours and a half after tracheotomy had been performed with perfect relief to the difficulty of breathing. There can be no doubt that tracheotomy in this case prevented death by asphyxia, and so gave a still further extension of time to cope with the disease, although, unfortunately, death ensued afterwards from paralysis and exhaustion. I feel sure that in diphtheria tracheotomy should be resorted to as soon as any signs of impeded respiration become evident, provided the impediment is not situated in the lungs, and that it should not be resorted to merely as a last resource.

In conclusion, I would say that this disease must be attacked boldly and resolutely, and with a feeling of assurance that in proportion as we do so success will attend our efforts. We must be ever on the watch, and must never relax our efforts for one moment until we feel sure that we have conquered.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

SPONTANEOUS RUPTURE OF LEFT AURICLE.

BY M. MACKINTOSH, M.B.

A FEW days ago I was called, early in the morning, to see a man who was said to be in a fit. I found him dead and cold, and lying on his right side as if in a quiet sleep. The face was not distorted, nor were there any signs of a struggle having taken place during the process of dying. The history given was that, on the previous evening, he had returned from work as usual, but complained of pain at the epigastrium, which he attributed to his having had a dinner of hard, badly cooked beef. A draught was procured from a chemist, which he took on going to bed; and on his daughter, with whom he lived, going in to see him in the morning she found him in the state described. He had been heard to get up once during the night, to see to a fire which he had in his bedroom. The man, I should say, was a widower, sixty-one years of age, and had for a long time been employed in engineering work. He was

always considered healthy, having never, according to his daughter's account, been laid up by illness in his life; and he was not intemperate in the use of alcohol. On opening the chest, the lungs were found to be healthy, but the pericardium was seen to be bulging forwards unduly. On making an incision, the pericardial sac was discovered to be full of dark blood, partly clotted and partly fluid. The heart itself was considerably enlarged, and its walls had undergone fatty degeneration. The cavities were empty, and the valves and attachments were in good working order. At the upper and posterior part of the left auricle there was a ragged, irregular tear, involving the whole thickness of the wall, and of a size which admitted of the insertion of the little finger. The margins of the aperture and the surrounding tissues for a distance of a quarter of an inch in each direction were ecchymosed. The liver was also the subject of fatty degeneration, and the stomach contained about four ounces of a brownish fluid. The brain and its membranes were healthy, though the skull was inordinately thick. The interest in this case lies in the rarity of the affection, and in the fact of death having taken place during sleep. Rupture of the heart is not itself common, and rupture of the left auricle occurred only in two out of 100 cases of rupture of the heart collected by Dr. Quain ("Dictionary of Medicine"). It seems to me probable that the pain complained of by this man the evening before he died was caused by commencing laceration of the auricular wall, originated, in all likelihood, by strain occurring during his work, and that this tearing process became complete during the night, the result being instant death. The marked ecchymosis in the neighbourhood of the aperture suggests the idea that the process was gradual.

Lavender-hill, S.W.

NOTES ON TREATMENT.

By T. FREDERICK PEARSE, M.D., F.R.C.S.

MANY little experiences of the general practitioner in the treatment of disease might be added to the stock of general knowledge, but, although they are often talked over in a friendly conversation, they seldom appear in print and are hardly ever considered worthy of public discussion. A vast amount of clinical knowledge is thus lost to the medical world, which the various means hitherto adopted for recording experiences have failed to secure. I propose here to put down very briefly a few of my experiences, not in any set manner, but "just as they come into my head," with the hope that others will take up this idea, put my statements to the test, and venture upon some of their own.

Angina pectoris.—Of all the drugs that have been tried for this distressing complaint nothing, I believe, by general experience comes up to the nitrite of amyl. In cases, however, where the attacks of pain occur very frequently, but are of a comparatively mild degree, the nitrite of sodium is more reliable and has a more lasting effect. Five-grain doses may be given without hesitation and repeated every four or six hours as may be necessary. Nitro-glycerine, like nitrite of amyl, is more rapid in alleviating the symptoms, but similarly its influence is of shorter duration. I think that the state of the patient's mind is relieved by combining small doses of morphia with the nitrite—at any rate, the combination has seemed to me a decided advantage. It has been my practice to keep a belladonna plaster over the left breast continuously for some weeks.

Aphthous ulceration of the mouth.—This is an affection occurring frequently in children, but chiefly in those of the poor, and is accompanied by general fever, invariably by a coated tongue, foul breath, loss of appetite (as well as fear to take food), and constipated bowels. These symptoms continue when not treated for several days. There are two points to be noted in this apparently trivial complaint. First, that it appears to be a general specific contagious disease, with the aphthous ulceration as a local manifestation; and secondly, that in its treatment it is most desirable to commence with a sharp purge. Locally, and given internally, chlorate of potash is a specific, but it should be suspended in glycerine instead of the usual honey or syrup.

Asthma.—Of the thousand and one things which have been tried for this disease, nothing in my experience is equal to the nitrite of sodium. I am not fond of mixing drugs, and I therefore generally give it alone. In some cases, however, with the object of promoting sleep, I combine it with hyoscyamus, and in others, again, I have found the tincture of lobelia of some additional benefit. When the nitrite of sodium first came into use I gave some large doses (ten to fifteen grains) in a case of uncomplicated asthma, which had occurred in repeated attacks for some years. The first dose made the patient so sick and faint that I could hardly induce her to repeat it; but although a second dose had a similar effect, the patient was freed from her asthmatic attacks completely, and had not had a recurrence when I last saw her, two or three years afterwards. Since then I have given it in from three- to five-grain doses, frequently repeated, and always with the greatest benefit. With regard to hyoscyamus in this affection, as well as in other diseases, I find that the ordinary doses are of little benefit. Two drachms of the tincture or of the succus for a single dose should be prescribed, and not less than one drachm when frequently repeated. Besides having an influence over many spasmodic affections, it has a most tranquillising influence on the mind. Given alone in asthma it will not relieve the spasm, but in combination with the nitrite of sodium the improved condition of the patient is sometimes simply marvellous.

Southsea.

TWO UNUSUAL CASES OF MAMMARY TUMOUR.

By HERBERT SNOW, M.D. LOND.,
SURGEON TO THE CANCER HOSPITAL.

IN respect of the first case here described, it should be remarked that although a single cyst in the mamma is of very frequent occurrence, and that an assemblage of several may occasionally be met with (especially in elderly women, and in association with cancer formation); yet a general cystic degeneration of the parenchyma had been previously unknown in the writer's experience, and is believed to be a rare affection. In the second the tumour coincided in situation with the wedge of gland parenchyma often prolonged over and under the outer edge of the pectoralis major muscle; and although its relation to the breast tissue proper was not perfectly clear, the juxtaposition of the two was so close that prior to operation it was considered a breast neoplasm.

CASE 1.—*General Cystic Degeneration of Breast Substance.*—Elizabeth J., aged forty-one, housekeeper, was admitted into the Cancer Hospital, May 27th, 1889. Single, no family history of cancer; much mental trouble, no injury; tumour noticed one week only. To the outer side of the left nipple was a flattened, moderately hard "lump," as large as a walnut; at one point quasi-fluctuation. The glands in the left axilla could be felt, but were not enlarged. The patient was admitted, and the tumour (cystic) excised. It was then found that the whole gland substance was pervaded by minute cysts, varying in size from a pin's head to that of a pea, and containing a greyish-white fluid. It was thus found necessary to dissect out the whole breast tissue by instalments, as each successive portion removed proved to be equally full of the little cysts. The nipple was not removed. Except the single larger cyst no indication of the actual condition, or of other tumour formation, was detected before operation. Since then, the patient still attending as an out-patient, a small apparently cystic nodule has appeared in the remaining organ, but has not hitherto been interfered with. It will be interesting to watch whether a similar condition be developed here. There was no trace of any cancerous deposit.

CASE 2. *Nævus.*—Jane D——, aged twenty-one, laundry maid, single, was admitted into the Cancer Hospital Jan. 7th, 1889. The tumour had been noticed when the patient was four years old; she was then taken to the Great Ormond-street Hospital, but nothing was done; the growth was stated to have since increased in size. At the edge of the right pectoralis muscle (rather under than over this) was a round fluctuating tumour as large as a walnut, freely movable. No enlarged glands. The tumour was excised, the gland substance being left untouched; the relationship between the two could not be well made out, but the former seemed to be an independent formation in the subcutaneous tissue at the edge of the muscle. It was composed of dilated vessels in a stroma of fibrous tissue.

Gloucester-place, W

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

TWO CASES OF EXCISION OF BURSÆ IN THE NEIGHBOURHOOD OF LARGE JOINTS; WITH REMARKS.

(Under the care of Mr. H. H. CLUTTON.)

THE question of the operative treatment of bursal enlargements in the neighbourhood of large joints is one which has never been devoid of interest to the practical surgeon. Few would recommend treatment by operation until a fair trial had been given to the ordinary measures, which frequently prove successful in such cases, but occasionally the question must be answered in favour of some one method—aspiration, aspiration and injection, incision and drainage, or excision. Most surgeons know of cases in which the simple puncture of bursal swellings has, especially in the popliteal space, been followed by the most serious symptoms, with suppuration in the joint, and perhaps the death of the patient. The injection of iodine has met with more favour in France than in this country, and although inflammation of the joint is said to be less likely to follow its use if the knee be kept extended, this, as Mr. Clutton observes, is apt to follow. As an example of the evils which may follow incision from causes not under the control of the operator, Surgeon-Major E. C. Gribbon[1] published a case in 1885 of much interest. He had under treatment a man aged twenty-seven, with a bursa extending into the popliteal space. This was partly emptied by a small incision. A few days later swelling appeared in the popliteal space at a higher point. It was aspirated, and afterwards an antiseptic incision made. Four days later the man got up and walked about. This was followed by suppuration in the knee-joint, which repeated aspirations did not subdue, and amputation of the thigh was required to save the life of the patient. With regard to excision, this method (not mentioned in most text-books, though possibly performed more frequently than published accounts would lead us to think) has much to recommend it. When one of these bursæ is incised and drained there is a membrane, exceedingly prone to inflame, extending, it may be, by direct continuity of structure from the drainage-tube to the interior of a large joint, and exposed to any accidental irritation from without, septic or otherwise. And although antiseptic precautions have improved the results of incision, as results were better after the operation for hernia under similar dressing, we may look for still further improvement when the bursa is removed, such as that which has followed excision of a hernial sac under somewhat similar conditions. Mr. Clutton draws attention again to the rarity of the operation of excision of these bursæ, his cases, those of Mr. Silcock, and the one by Mr. Johnson Smith[2] all going to prove its safety. The development of bursal swellings in the supra-spinous fossa is not common, and, contrary to the opinion expressed in Holmes' System of Surgery,[3] Foucher states that two-thirds of the popliteal bursal swellings which require treatment are enlargements of the gastrocnemio-membranosus bursa.

CASE 1.—Mrs. P——, aged thirty-seven, was admitted into St. Thomas's Hospital in September, 1889, with the following history. About eight years ago she "over-reached" her right arm and felt pain in the shoulder, which had never entirely ceased. Five years ago she first presented herself to Mr. Clutton in the out-patient room with a small fluctuating swelling in the supra-spinous fossa of the right scapula. It was then tapped, and straw-coloured fluid drawn off. From that time till the date of her admission into the hospital she came irregularly to the out-patient room, and always with the same complaint—namely, pain down the right arm, which prevented her from using it as freely as she would wish. The cyst was tapped on many occasions and always contained the same kind of straw-coloured fluid. The tapping gave her temporary relief. The shoulder-joint was freely movable, but she herself could only with difficulty put the joint through its ordinary range of movement. At first it was thought to be a case of early osteo-arthritis with a synovial diverticulum along the supra-spinatus tendon, for the joint seemed somewhat larger than its fellow; it was also slightly tender, and there was a faint suspicion of crepitation. But when she again presented herself for treatment, after an interval of about two years (and five years from her first visit), and it was seen that the evidence of any joint disease was quite as doubtful as on the first occasion, it was determined that some radical treatment might justly be attempted. It was then a large fluctuating swelling behind the right clavicle. Believing that the removal of the whole cyst, or as much of it as was possible, was better than an injection of iodine, Mr. Clutton on Sept. 21st (the patient having been admitted) made an incision four or five inches in length behind and parallel to the right clavicle. The cyst was opened so as to obtain more room for dissection, and found to contain solid flaky masses in a watery fluid. The walls were exceedingly thick and intimately adherent to the tendon of the supra-spinatus muscle towards the acromion process. They were, however, easily dissected off the muscle and tendon as far as the acromion process, but at this spot the dissection could not be carried further without sacrificing the integrity of the acromion process or clavicle. A probe was passed along the cavity to see how far it extended and whether it communicated with the joint. The pedicle was then severed with a pair of scissors at the farthest point that could be reached, leaving about half an inch of the cyst beneath the acromion. The probe did not demonstrate any opening into the joint. The wound healed by first intention, and she had no rise of temperature. She left the hospital on Oct. 6th, and attended in the out-patient room on Oct. 15th, when the following note was made: "Wound quite sound, free movement in shoulder, no pain now at all down the arm." She has been seen several times since, and says that she can now use the arm without any pain or discomfort. The movements also in the shoulder appear to be as free as on the opposite side.

CASE 2.—A boy, aged twelve, was admitted into St. Thomas's Hospital in September, 1889, with a large popliteal bursa. He had been treated in the out-patient room for a month by splint and blistering, but without any improvement. He had noticed the swelling at the back of the left knee for three or four months. The bursa was considerably larger than is usually seen at this age, and was situated on the outer side of the popliteal space. On Sept. 19th it was excised. It was intimately adherent to the outer head of the gastrocnemius, from which it was with difficulty dissected without opening. No other muscle was in close contact with it. It was a very irregular and sacculated bursa, but as it had been removed entire it could not have communicated with the joint. The wound healed by first intention, and there was no rise of temperature. He was seen in the out-patient room on Oct. 15th, when the following note was taken: "No limitation of movement in the knee, no pain or discomfort of any kind." He has not made his appearance since then, but it is fair to assume that he finds no difference between the two knees.

Remarks by Mr. CLUTTON.—I did not know of Mr. Silcock's cases recorded in the Clinical Society's Transactions, vol. xxii, p. 163, till the volume was issued last autumn (Oct. or Nov.), but his paper was read on Feb. 22nd, 1889. He there states that he had been told that his treatment of excising popliteal bursæ was "heroic," and, moreover, says that he had been unable to find more than one other recorded case. In support of his contention I have thought it right to publish these two cases as a small contribution to the subject. The first case was of considerable interest from the doubt that was at first naturally felt as to the real cause of the enlarged bursa. If it had been a case of osteo-arthritis, little good could have been anticipated from the removal of a synovial diverticulum; but the lapse of time, coupled with the absence of any positive signs of progressive disease in the joint, effectually dispelled these fears. In the second case I was led to excise the whole bursa instead of leaving a portion, as Mr. Silcock did, from the fact that I expected, on approaching the posterior ligament of the knee-joint, to find a

[1] THE LANCET, vol. i., p. 427.
[2] Ibid., vol. ii., 1878.
[3] Vol. ii., p. 177.
[4] Ashhurst: Encyclopædia of Surgery, vol. iii., p. 722.

prolongation through this ligament round which I might throw a ligature; but, finding that this was not the case, and that I had practically isolated the entire growth, it was as easy to remove the whole as to leave a portion. On further consideration, it would seem to me the easier and the better practice to leave a portion whether it communicates with the joint or not. It would shorten in most cases the amount of dissection, and leave the patient more nearly in his natural condition. It is scarcely necessary at the present day, when surgical wounds do so well, to argue against other forms of radical treatment of these bursæ close to large joints. The injection of iodine, for example, is more likely, in my opinion, to produce a synovitis of the knee than an aseptic wound with a partial or complete removal of the bursa.

TORBAY HOSPITAL.

A CASE OF FRACTURE OF THE CORONOID PROCESS OF THE ULNA.

(Under the care of Mr. G. Y. EALES, late house surgeon.)

THE number of authentic observations of this fracture which have been published is small, but there is no doubt of its occasional occurrence. A fracture of the process without some complication is very rare. In none of the cases in which the signs during life were thought to indicate it was any actual proof forthcoming that the supposed injury had been correctly diagnosed. There remains therefore some doubt as to what the exact signs which indicate a fracture of the coronoid process really are, and it is of importance to record those injuries to the elbow in which it is considered that the process has been broken. Dr. Lediard[1] records a case in which he performed excision of the elbow-joint in a man aged twenty-eight for a dislocation backwards of the forearm, with almost complete inability to produce flexion, pronation, or supination. Examination of the parts excised showed that a considerable piece had been broken off the coronoid process, the fractured surface having eroded and polished the posterior surface of the trochlea. The signs which were presented by the man when the injury occurred some time earlier are not recorded, as he had been under treatment by a "bonesetter." Mr. Holmes was of opinion that the fragment removed at the operation had been still attached to the brachialis anticus; it is possible that this condition was present in Mr. Eales's patient. Few have been unaccompanied by "partial or complete displacement of the ulna, or of the radius and ulna backwards, accompanied with the usual signs of these luxations,"[2] and, what has been considered most diagnostic, a remarkable tendency to redislocation when extension of the forearm has been discontinued. Fracture of the tip of the process is not attended with displacement, but if nearer the base the muscle would most likely draw the separated fragment upwards, and permit of its being felt. Other examples of this injury have been published in our columns, notably those described by Mr. Pennock[3] and Mr. J. Scott Battams.[4] There is also one described during recent years by Mr. Mitchell.[5]

About a year ago a labourer, R. T——, aged thirty-two, came to the out-patient department of the Torbay Hospital one morning and stated that the previous evening, while walking in the dark, he tripped over an object in the road and put out his right arm to save himself, thus falling with the whole weight of his body on to his right hand, his forearm being at the time fully extended. He felt something crack, as he described it, in the elbow-joint, and on flexing his forearm experienced considerable pain, together with a grating sensation in the joint.

On examination fourteen hours after the accident the following points were observed:—1. Some amount of effusion in the elbow-joint. 2. Tenderness on pressure in the bend of the elbow. 3. Inability to flex the forearm completely owing to pain. 4. Distinct bony crepitus on passive flexion of the forearm. 5. The crepitus occurring when the arm was more than half flexed. 6. On placing a finger at the bend of the elbow the crepitus seemed to be apparently immediately underneath. Careful examination showed that the lower end of the humerus and head of the radius were uninjured, while pronation and supination of the latter bone caused no discomfort. Considering this to be an unusually interesting case it was shown to the surgical staff, who agreed with Mr. Eales that the only reasonable diagnosis was that of fracture of the coronoid process of the ulna. The arm was put up and retained in the flexed position for nearly three weeks without any apparent benefit, when the patient passed from observation, probably dissatisfied with the slow progress which was being made and to seek advice elsewhere.

Remarks by Mr. EALES.—The noteworthy features of this case were (1) the difficulty of retaining the fractured ends of the bone in apposition, (2) its being uncomplicated with dislocation of the forearm backwards, and (3) the fact that the head of the radius was uninjured. Bryant quotes a case in which this lesion coexisted with fracture of the head of the radius; and Holmes states in his "System of Surgery" that this injury has been said to occur in connexion with dislocation of the radius and ulna backwards; or that it may occur without any complication. There appears to be very little known about this injury, but the weight of evidence seems to show that it rarely occurs without one or other of the above-mentioned complications, and that when the radius is involved its head is usually split longitudinally. In this case there was no reason to suppose that the forearm had been dislocated backwards and had become reduced before the patient came under observation, as he distinctly stated that after the accident he could more than semiflex the forearm, and could do so completely with the passive aid of his left hand. I feel constrained, therefore, to quote this case as one of pure and simple fracture of the coronoid process of the ulna, and imagine that the force of the fall was in some unaccountable way transferred principally to the head of the ulna, and perhaps insufficient to produce any lesion to that of the radius. The treatment of this case also seems to bear out the saying of Mr. Holmes, that union is usually ligamentous, owing to the inability to bring the fragments of bone in apposition and retain them so.

[1] THE LANCET vol. i. 1884, p. 799.
[2] Hamilton, Fractures and Dislocations, p. 365.
[3] THE LANCET, 1828. [4] Ibid., vol. ii. 1878, p. 207.
[5] Brit. Med. Jour., vol. ii. 1884, p. 1073.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Mechanism of Suspension in Locomotor Ataxy.—Strangulated Cæcal Hernia.

AN ordinary meeting of this Society was held on Jan. 28th, the President, Sir Edward Sieveking, in the chair.

A discussion took place on the paper read at the last meeting by Dr. JAMES CAGNEY, on the Mechanism of Suspension in Locomotor Ataxy.—Dr. GEORGE OGILVIE said that the author had shown conclusively that suspension produced relaxation of the spinal cord in the dorsal region. He had had considerable experience of this method of treatment; in many cases in which morphine had been used for several years for violent pain, the latter had been entirely cured by the suspension and the morphine abandoned. If a result such as this could be obtained by the treatment a great gain was made. He saw no advantage, but a certain amount of danger, from suspension by the neck, and was glad to see it condemned on scientific grounds.—Dr. LITTLE could not agree with the dicta laid down that suspension by the head was dangerous, and that suspension under the arms answered all purposes. Suspension by the head was not dangerous if properly conducted according to Charcot's directions, two-thirds of the weight of the body being borne by the arms, and one-third by the chin and occiput. The suspension by the head should be commenced by degrees, and Dr. De Watteville's instrument allowed this to be done gradually. If locomotor ataxy were a disease attacking the nervous system, not only in the dorsal spinal region, but also in parts higher up, suspension by the arms alone could scarcely accomplish all that was expected of it.—Mr. ROUGHTON asked on what ground the statement had been made that suspension produced a real lengthening of the cord. He was glad to hear that suspension by the head was condemned, for from personal experience he could say that the immediate results were most unpleasant.—Dr. CAGNEY, in reply, said that if the cord was benefited by relaxation in the dorsal region, the probability was that a similar lesion would not be benefited by stretching in the

cervical region. It was certain that in no case was it possible to stretch the spinal cord in the dorsal region, and suspension by the head, in so far as it was directed towards stretching the cervical district of the cord, was likewise useless. At the Padua Medical Congress last year some instances of death following suspension by the head were placed on record. Mr. Victor Horsley had shown some time ago that it was not possible to stretch the cord under any circumstances by extension of the trunk. Charcot's views on the matter were entirely empirical, and he had declined to state that stretching the cord would have any effect on a tabetic lesion. The author himself believed that any benefit following suspension was derived from relaxation, and not stretching of the cord, and that the explanation of the good done was probably twofold, adhesions being mechanically broken down and a modification in the vascular supply being induced.

Mr. WILLIAM H. BENNETT then related a case of Hernia of the Cæcum, entirely wanting in a peritoneal sac, in which strangulation at the internal abdominal ring coexisted with an intussusception through the ileo-cæcal valve. A labourer, fifty-two years old, was admitted into St. George's Hospital on Oct. 26th with symptoms of strangulation in a previously reducible and apparently old-standing scrotal hernia. Twenty-four hours before admission he felt some burning pain in the scrotum and found the hernia down, although none of the ordinary sensations warning him of a sudden descent of gut had been experienced. The rupture slowly increased in size, and all attempts at reduction failed. When the man was seen by the author, six hours after admission, a pyriform swelling, as large as two closed fists, occupied the right side of the scrotum, and was clearly a strangulated hernia. Upon performing herniotomy, an oval, fluctuating tumour was exposed, which had not the appearance of peritoneum, and which was suspected to be gut, although no peritoneal sac had been seen. As the hernia was absolutely irreducible, in spite of very free division of the constricting soft parts, and as a hard mass of doubtful nature was perceptible inside the tumour, the latter was opened, upon which a large quantity of perfectly clear fluid escaped, such as often comes from a hernial sac. The structure opened was the cæcum, and projecting into it through the ileo-cæcal valve was an invaginated piece of gut three inches long. The cæcum was entirely free from peritoneal covering, but behind it, adherent to the testicle, was a piece of omentum lying in a peritoneal sac, which had presumably also contained the reducible hernia described by the patient. All attempts to reduce either the intussusception or the hernia having failed, and as the critical condition of the patient negatived the propriety of abdominal section, a temporary artificial anus was made, with a view to future proceedings for the restoration of the normal state of the parts. The patient did not rally sufficiently for further treatment, and died of asthenia on October 29th. The case was described in detail, and the following points were briefly discussed:—1. The extreme rareness of extra-peritoneal hernia of the cæcum. 2. The small percentage of cases of strangulated hernia of all kinds in which the cæcum was found in the sac. 3. The relation of the intussusception to the production of the hernia, and *vice versâ*. 4. The escape of clear watery fluid from the bowel when opened. The coexistence of two such conditions as extra-peritoneal hernia of the cæcum and ileo-colic intussusception appeared to the author to be unique amongst recorded cases. The author appended a table of the only cases in which the cæcum was found to form any portion of the hernial tumour in a series of 565 herniotomies described in the records of strangulated herniæ at St. George's Hospital. The principal points indicated by the table were (1) the comparative infrequency of strangulated hernia of the cæcum in any form, the number of cases met with in this large series of 565 herniotomies, amounting to only 1·59 per cent.; and (2) the extreme rareness of uncomplicated cases of this form of strangulated hernia, two instances only being found in this same series—i.e., ·35 per cent. The very high rate of mortality (66·6 per cent) was clearly due to the critical condition of the majority of the patients at the time of operation.—Mr. TREVES said that most of the text-books stated that hernia of the cæcum was contained in no sac; that all herniæ, in fact, possessed sacs except those of the bladder and cæcum. This statement appeared to have been copied through many text-books from Scarpa, who gave a detailed account of a case, and illustrated it by a series of drawings. It was that of a man of sixty, who had a cæcal hernia of many years' standing; the sac was almost obliterated by adhesions, and the cæcum, being irreducible, was boldly excised, and the man recovered with an artificial anus. He had found fifteen cases of hernia of the cæcum in which either the details were correctly given or the specimens were extant. Thirteen of these cases had a complete sac, while in two there was practically little or none. One case, in the museum of St. Bartholomew's Hospital, which was described as containing cæcum and having no sac, was found to contain only sigmoid flexure, and to have a very good sac. It was possible for a cæcal hernia to lose a great part of its sac, for the small gut might pull up a portion of the peritoneum from the face of the cæcum, and this baring of the cæcum might happen in other ways. Cæcal herniæ often became inflamed, and in a larger number of cases incarcerated, but instances of strangulation were very uncommon. In the present case, the facts that the patient walked to the hospital, and that on operation the appearance of the parts was quiet, and showed so little circulatory disturbance, might induce Mr. Bennett to lay less stress on the idea of strangulation being present. The association of intussusception with cæcal hernia was remarkable. Joseph Bell had found an intussusception associated with a band, and a fair number of cases were recorded in which intussusception was associated with strangulated small bowel. With regard to the existence of watery fluid, it probably arose from the œdematous condition of the intussusception. In cæcal hernia the coexistence of a neighbouring sac containing small bowel was comparatively common. The only case that he himself had seen on the left side was one of labial hernia; in the centre of it the cæcum was adherent to the thin skin of the sac, forming a dimple like an umbilicus. He left the skin adherent to the gut, and, having cleaned it, returned it with the bowel into the abdomen with a successful result.—Mr. HULKE looked upon the case as unique. Some years ago a boy was sent to him at the Middlesex Hospital with a large double scrotal rupture. That on the right side was irreducible. When he cut down he could discover no sac, but found the muscular coat of the cæcum and the vermiform appendix. At the upper part of the rupture, however, the ascending colon was found surrounded by a complete sac; the peritoneal coat had probably become stripped from the cæcum. If the ascending colon came down and was fixed to the internal ring, there was a practical difficulty in reduction, for when the cæcum was returned it would be bent at an acute angle on the colon. A woman was recently brought into the Middlesex Hospital with a large femoral hernia already becoming gangrenous. The dead tissue was clipped away from the front of the sac and a pouch was found with two holes leading into the intestine. The patient sank and died, and at the necropsy Mr. Leopold Hudson found that the rupture contained cæcum only; the vermiform appendix and ileo-colic valve both being within the abdomen. The case was doubly interesting on account of the presence of two ureters on the right side, one of them opening into the floor of the urethra, while the other terminated normally at the trigone.—Mr. BARWELL related a case in which an intussusception of the small intestine coexisted with a large strangulated scrotal hernia.—Mr. BENNETT, in reply, said he was of opinion that the hernia was undoubtedly strangulated. The adhesion of the parts was at the neck of the hernia; the herniated portion of the gut lay free in the cellular tissue. The fluid in the sac he regarded as the result of œdema. He agreed with Mr. Hulke that if the ascending colon were adherent near the internal ring, it would not be proper to reduce the cæcum. He thought the case worthy of record as one of coexistence of the rarest form of hernia with the rarest form of intussusception.

CLINICAL SOCIETY OF LONDON.

Sacculated Vesical Calculi.—Calculus Impacted in the Ureter.—Erasion of Hip-joint through Anterior Incision.

AN ordinary meeting of this Society was held on Jan. 24th, Mr. Willett, Vice-President, in the chair.

Mr. G. BUCKSTON BROWNE read notes of two rare cases of Sacculated Vesical Calculi in the Male, successfully removed by supra-pubic cystotomy. He said that during the past year he had operated upon fifty-one individuals for stone in the bladder, that in eight he had been obliged to

perform lithotomy, and that all the lithotomy cases illustrated the advantages of the supra-pubic method, especially the two cases which he proceeded to describe. The first case was one of a collection of small stones in a sac on the floor of the bladder, the neck of the sac being too small to admit a lithotrite. The patient, a man aged sixty-eight, passed all his urine by catheter. The calls to use the instrument were most urgent, and during the night the catheter was passed every two hours. Sitting down caused great pain. There was muco-pus in the urine. On sounding the bladder, stone was found. Lithotrity was performed on Feb. 8th, and several calculi removed, consisting of uric-acid centres with considerable phosphatic incrustation. The urine became almost translucent, and was soon held for six to seven hours. The patient went home in less than three weeks. During March he remained in good order. Towards the end of April the old pain on sitting down came on again, and riding in a cab caused uneasiness. On April 27th, under an anæsthetic, three facetted calculi were washed out by means of a No. 16 (English) tube and aspirator; a fourth stone was too large to come through, and had to be crushed before being washed out. On sounding with a small (No. 6) sound, the instrument at first failed to find anything of a calculous character, when suddenly the reversed beak slipped into a little place on the floor of the bladder, and to the patient's left, which felt like a bag of small shingle. The sound could again and again be put into this place, but a prolonged attempt to get in the beak of a lithotrite was unsuccessful, and the most persevering attempts with tube and aspirator failed to dislodge or wash out a single calculus. At last, as the patient had not consented to the use of the knife, the operation had to be abandoned. The removal of the free calculi was followed by relief, but the patient returned in a month with the old pains. On June 1st the bladder was opened above the pubes. A stone as big as a horse-bean was found in the bladder and removed. Trabeculæ crossed the bladder walls in all directions, and many orifices to distinct sacs were felt, but the finger could feel no more calculi. A small sound was then passed in through the wound, and its point soon passed into a sac on the floor of the bladder and to the patient's left, and a mass of small calculi distinctly felt there. The sound was followed down by the left forefinger, its tip barely reached the orifice of the sac, and it could not be passed in until the rectal plug was removed and firm pressure upwards made by the right forefinger passed into the rectum. In pressing the tip of the left forefinger into the sac the orifice was evidently and necessarily lacerated, and bright blood began to flow. One by one with the left forefinger nail each calculus was evacuated from the sac into the general cavity of the bladder, and then removed by finger and scoop. This difficult proceeding occupied an hour. The supra-pubic wound was healed in two weeks, and the patient left town a month after the operation, able to hold urine seven hours and a half, and he has since remained perfectly well. Possibly the calculi were impacted within the orifice of the left ureter, but the author was more inclined to think from there being no history of renal colic that a vesical sac just below and in front of the orifice of the left ureter offered itself as a convenient receptacle for calculi as they come down through that tube, and that occasionally a stone would work out of the sac into the bladder cavity and cause vesical symptoms. In the second case, a man aged seventy-four, there was a long history of troublesome prostatic retention of urine, beginning with complete retention, and only relieved after long delay and difficulty. All urine was passed by catheter every four hours. The most marked symptom was violent vesical spasm both before and after catheterisation. He had been sounded twice by an accomplished surgeon in the country. The first time it was thought a stone was struck, but no calculus was found at the second examination. He could not bear carriage exercise, and existence was only rendered tolerable by the free use of morphia and belladonna. For some years a truss had been worn for a right inguinal protrusion. On sounding, a stone was found in the cavity of the bladder, and arrangements were made for the performance of lithotrity. The urethra measured ten inches and a half, and owing to the great size of the prostate difficulty was anticipated, and instruments for lithotomy were taken. On June 17th ether was administered. Three large stones were found lying behind an enormously enlarged prostatic middle lobe. These were crushed, but much of the débris seemed to escape the lithotrites and evacuating tubes, and a sound was passed to make a careful exploration. Much broken stone was felt in a deep post-prostatic pouch; but the sound, which, fortunately, was long, measuring eleven inches, passed upwards, and to the patient's right, into what had been considered to be an ordinary inguinal hernia, and there found two large stones. When the hand was placed upon the groin the calculi and end of the sound could be perfectly well defined grating one against the other. The case was evidently quite unsuited for lithotrity, and without moving the patient from the bed the bladder was opened above the pubes, and the post-prostatic pouch, bladder cavity, and large vesical inguinal sac cleared of their calculous contents by means of scoop and free warm-water irrigation. The débris from the bladder weighed 9 drachms, and the two facetted calculi from the sac weighed respectively 2½ and 1 drachm; they were of uric acid. In three weeks the wound was healed. The patient had since been remarkably well and comfortable, and during the summer often swam in the open sea. Mr. Buckston Browne said he brought these cases forward to illustrate some of the difficulties both in the diagnosis and treatment of stone in the bladder, and also the facilities offered by the supra-pubic operation. He could not conceive how the first one could have been saved by any other means; and although the second case might have been treated by lateral lithotomy, he thought that proceeding would have been highly dangerous, both from the necessary tediousness of the operation and the free bleeding which must have continued until all the stones had been extracted.—Mr. GODLEE asked how, in the first case, the sacculus got into the hernia, and whether after the operation it was left in the hernia or reduced. He referred to a case of leucocythæmia in which there was a collection of small calculi at the lower end of the ureter; perhaps Mr. Browne's was a similar case.—Mr. BUTLIN had a patient with stone in the bladder, which he could feel with the sound, but found difficulty in laying hold of it with the lithotrite. At the necropsy a stone was found in a sacculus. He had siezed it and crushed it; but in doing so he had made a hole in the very thin wall of the sacculus, and had permitted the escape of urine into the peritoneum, setting up fatal inflammation.—Mr. BERNARD PITTS saw a child at Great Ormond-street Hospital presenting all the ordinary symptoms of stone. He could only strike one with the sound; but rectal examination revealed two stones, one of which was fixed. A supra-pubic opening was made, the stone removed, and the other found in the end of the ureter, covered by mucous membrane. He dilated the mouth of the ureter with difficulty, and then pricked the stone with a needle and succeeded in chipping it, and, a bent probe being passed behind it, it was got out. The stone was triangular, and the apex presented downwards. This case emphasised the value of rectal examination, for without it the second stone could not have been found.—Mr. BRUCE CLARKE said that some of these calculi, apparently lying in vesical calculi, were really formed in the prostate. He referred to a case in which a number of ordinary prostatic stones made their way by ulceration on to the floor of the bladder. In another instance he was preparing to do lithotrity when the man passed twenty or thirty small stones, and the symptoms subsided. The supra-pubic procedure was the only operation for encysted calculus. In one case of supra-pubic lithotomy he had been obliged to open the peritoneum.—Mr. HOWARD MARSH said that the cases which had been related all told in favour of the supra-pubic operation; he had come to the conclusion that in almost every case that was the best. He had done it many times in children.—Surgeon-Major BARKER had performed the lateral operation fifty-seven times in children without a death, whereas his scanty experience of the supra-pubic operation was not a happy one. Except for very large stones he doubted whether the lateral operation would ever be superseded.—Mr. A. E. BARKER related a case where a greatly hypertrophied bladder contained foul urine, and there was much fat above the pubes. A stone was found which was adherent, and the bladder was coated with phosphates. It was washed out with hot water and a drain-tube inserted; but, though the operation was done a year ago, the wound had not healed up yet. Though the supra-pubic operation was by far the best in most cases, yet in such a one as he had mentioned he thought the lateral method would have given better drainage.—Mr. BUCKSTON BROWNE, in reply, said the protrusion only occurred in the first case when the patient stood up; he was still wearing a truss, and the sacculus was perfectly reducible. The walls of sacculi were often thin, especially at the base of the bladder; the stones in his own case were small and multiple, and required no crushing.

A rectal examination ought to be part of the routine in every case. The perineal operation would probably never be done unless urinary abscess or extravasation were present. The only case in which he had had trouble was one in which he had put a suture into the bladder walls; he now never put a stitch into a supra-pubic wound.

Mr. GODLEE read for Mr. G. Twynam, of Sydney, a case of Calculus Impacted in the Ureter removed by Operation. The patient, a child aged eight, was admitted into the Prince Alfred Hospital, Sydney, in May, 1888. He had had pain in the abdomen and hæmaturia at irregular intervals for sixteen months. He had been sounded, but no stone was found. The urine was sometimes clear, sometimes contained a large amount of blood and large mucous casts, but no trace of bilharzia or shreds of tumour. In June, 1888, he vomited a round worm, and after this he was free from hæmaturia for a month, but it recurred at the end of July. The pain was felt over the pubes and at the tip of the penis after micturition. The temperature varied from 97° to 100°, being subnormal when the blood was present. In December he complained of pain at the umbilicus and in the left loin. At this time he was not in the hospital, but was readmitted in January, 1889, with a temperature of 104°, pus and mucus being present in the urine. There was distinct tenderness, but no pulse in left flank, and the patient leaned over to the left side. The temperature remained high. On Feb. 6th an exploratory incision in the left linea semilunaris was made, and the left kidney and ureter examined, but no stone was found, a small calculus was detected in the right ureter two inches from the bladder, and when pressed down could be felt by the finger in the rectum. The wound was closed and healed well. The temperature remained normal till Feb. 23rd, when it rose to 106°. He had an attack of convulsions three days after the operation, and was unconscious for some days afterwards. On Feb. 27th an operation was undertaken for removal of the stone through an incision similar to that used for tying the common iliac artery. Some difficulty was found in isolating the ureter, but it was ultimately accomplished, and the stone was extracted with forceps through a linear incision. It weighed 6 gr., and was just the size of a No. 12 catheter. The wound in the ureter was stitched with fine silk by means of a fine-eye needle, and this was very difficult to accomplish. A drainage-tube was introduced to the bottom of the cavity and the wound was dressed with salicylic wool. Urine, however, soaked freely from the wound for three days, so that the dressings had to be frequently changed. Some suppuration occurred, necessitating the removal of the stitches with which the wound had been closed, and there was some rise in temperature, lasting for a few days. On the fifth day the urine ceased to flow from the wound, which then rapidly healed, and the boy made a perfect recovery. The striking points about this case were:—1. The difficulty in diagnosis, owing to the fact that a stone in the bottom of the right ureter caused pain in the region of the left kidney. 2. In the novel method of removal of a stone situated so low down in the ureter.—Mr. GODLEE, referring to cases of transmission of pain, said he had recently cut into a kidney on the right side, but he had found nothing there. He had also seen cases of peri-typhlitis in which the pain was on the left side. As to the nature of the transmitted pain, he thought in some cases it might be colicky; he wondered if the transference occurred more often on one side than on the other. Through the ordinary lumbar incision the ureter could be examined as far as the brim of the pelvis, but Mr. Twynam's idea was to get to the ureter in a new way in that part of its course which lay between the bladder and the pelvic brim.—Mr. WILLETT thought that the same incision might also be convenient for a stone impacted somewhat higher up.—Mr. PITTS had tried to reach the ureter experimentally in order to divert it, and he used an incision as for the external iliac artery. Some good might be done by diversion in cases where the bladder was unfit for the reception of urine or the patient's life was made miserable.—Mr. MARSH said he assisted Mr. Smith many years ago to divert the ureters into the rectum in a case of extroversion of the bladder; the operation was performed through the loin. One of the ureters broke away, and the corresponding kidney became disorganised, while on the opposite side acute nephritis and suppression occurred, apparently from the passage of gas into the ureter.—Mr. BLACK said that Davy's lever could be used to compress one ureter and test the urine coming from the opposite kidney.—Mr. CROFT asked what method was adopted of suturing the ureter; if the mucous membrane were included in the wound it would not close.—Mr. GOULD imagined that the ordinary rule was followed, and the mucous membrane excluded. Referring to the transference of pain from one side to the other, he said he had seen a considerable number of cases of lumbar exploration which ended in disappointment; in more than half the cases no stone had been found, in others considerable masses of stone had been discovered, and yet there were no distinct symptoms. He would therefore rather explore by the abdominal than by the lumbar method.—Mr. BRUCE CLARKE had also seen some instances of referred pain. In some cases he thought it could be explained by the presence of the uric-acid diathesis; small gravel passing down the opposite side causing more irritation than a large stone on the diseased side. If ever he felt in doubt he would open the abdomen.—Mr. GODLEE did not believe it was of any importance to suture the ureter, as a longitudinal incision made in it healed as readily as a similar one did in the urethra. It was not easy to explore the abdomen where no large tumour was present, but a lumbar exploration of the kidney was almost, if not quite, free from danger.

Mr. LOCKWOOD showed a boy, aged six, upon whom he had performed the operation of Excision of the Head of the Femur with Erasion of the Hip-joint, with immediate and permanent closure of the wound. The operation was performed during a comparatively early stage of suppurating synovitis of the hip-joint, and upon a patient who had been treated for three months with rest and extension followed by relapse. The usual symptoms were present, and there was half an inch of real shortening. The inguinal and iliac lymphatic glands were enlarged and tender. The hip-joint was opened by the anterior excision, and a quantity of turbid fluid evacuated. The head of the femur was found partially displaced from the acetabulum, and the epiphysial line rough. The head of the femur was sawn off and removed, the acetabulum erased with a sharp spoon, irrigated with perchloride of mercury lotion, thoroughly rubbed with iodoform, closed with sterilised silk sutures, an alembroth dressing applied, and pressure made with a rubber bandage. The operation was performed on March 13th, and the dressing and sutures removed on April 1st, when the wound was healed. The day after the operation the temperature was 100° F., with a good deal of vomiting, but otherwise there was nothing to record. The child had now a freely movable hip, and walked with great ease and without pain. There was not more than half an inch of shortening. The result of this case was attributed to the early date of the operation, to the use of the anterior incision, and to the fact that the operation was aseptic (as proved by cultures made from the dressing when removed). Tubercle bacilli were looked for but not found. Although Mr. Lockwood considered excision of joints by no means to be commended, yet in the present case he was in favour of early aseptic operation in suppurating synovitis of the hip.—Mr. CROFT said with regard to the pathology of the case he would have been glad to have known whether it were one of tubercle or not. One great reason in performing excision in tubercular disease was to remove a focus of inoculation, and if the case were non-tubercular that reason for operation would not exist. In these cases he preferred to get a movable joint, which for most purposes was better than a stiff one.—Mr. JOHNSON inquired after the condition of the femur and the acetabulum.—Mr. MARSH alluded to the great improvement that had taken place in operating for hip disease.—Mr. BARKER had operated by this method five times since his last paper on the subject: in four union by first intention occurred.—Mr. LOCKWOOD replied that the demonstration of the tubercle bacillus was the only positive evidence of the presence of tubercular disease, but this evidence was not forthcoming in the majority of cases of joint lesion. The fluid evacuated was distinctly not pus. The acetabulum was smooth, but the head of the femur was rough, and the epiphysis eroded.

MEDICAL SOCIETY OF LONDON.

Tubercular Basic Cavity.—Undescended Testicles.—Thomsen's Disease.—Complete Epispadias.—Removal of Internal Semilunar Cartilage for Derangement of Knee.—Cardiac Disease with Nervous Symptoms.—Instrumental Indentation of Frontal Bone.

A "CLINICAL EVENING" of this Society was held on Jan. 27th, the President, Dr. Theodore Williams, in the chair.

The PRESIDENT exhibited a case of Basic Tubercular Cavity in a man aged thirty-one, who twelve years previously was the subject of left-sided pleurisy, and had had winter cough ever since. Considerable hæmoptysis occurred five months ago, and was repeated later, but the usual symptoms of phthisis were absent till about two months ago, when, on admission to the Brompton Hospital, a well-marked cavity was detected at the base of the left lung, and the sputum was found to contain tubercle bacilli. There had also been considerable pyrexia, and the apices of both lungs presented the physical signs of tubercalisation. He remarked that primary basic cavity was exceedingly rare, and when it occurred was generally the result of the usually active movement and free ventilation of the lower lobe being interfered with by pleuritic adhesions, as in the present case, thus placing it under conditions similar to those of the upper lobe, the usual seat of tubercle. When a cavity formed at the base, it generally increased in size, owing to the ulcerative processes being promoted by the difficulty of expectoration. In the present instance it was impossible to say definitely whether the cavity was primary or secondary, the physical signs not absolutely precluding the presence of old tubercular disease at the apices. The President also showed for contrast a case of bronchiectasis at the base of both lungs.—Dr. SAVILL asked what sign the President relied on mainly to detect the existence of a cavity.—Dr. F. LITTLE inquired whether in women who laced tightly tubercle attacked the bases of the lungs.—Dr. WILLIAMS, in reply, said he relied on the signs on coughing, especially the cavernous gurgle. Pectoriloquy was valuable, but it might lead to error. Tight lacing did not interfere with the working of the diaphragm, and therefore did not predispose to tubercular deposition at the base.

Mr. WATSON CHEYNE showed a boy aged twelve who had been operated on for Partially Descended Testicles. On both sides the testicles were lying in the inguinal canal, but could be made to protrude through the external abdominal ring. The right side was first operated on a year ago, the testicle and cord were freed, and the testicle stitched to the bottom of the scrotum, the external ring stitched, and, while the testicle was held in place, a stitch was passed through the cord at the upper part and the skin on each side, with the view of preventing the retraction of the cord. The result was fairly satisfactory. The left side was operated on ten months ago in much the same manner, with the exception that a stitch was passed through the cord just above the testicle, carried out through a hole at the bottom of the scrotum and tied to a projecting bar on a wire frame fixed in the perineum. In this way constant traction was kept up on the cord in the hope that it would stretch. On the eleventh day this stitch was removed, and the result was quite satisfactory. The left testicle was now practically in its normal position in the left scrotal pouch.—Mr. CLUTTON asked whether the epididymis was separated from the testes in order to bring the latter down.—Mr. PYE doubted the utility of the operation.—Mr. BUCKSTON BROWNE inquired if there were pain after the second operation.—Mr. CHEYNE, in reply, said there was but little pain. He thought the testes were better in the scrotum, as they were a nuisance in the groin. He did not separate the epididymis, but simply attached a stitch below.

Dr. HALE WHITE showed a patient suffering from Thomsen's Disease. He was a man aged nineteen. He had suffered since he was a child. His father, one sister, and two cousins were affected. The patient had the characteristic stiffness of voluntary movement. Thus, if he flexed his fingers, he could not extend them again for about eight seconds; the second time he flexed them the time was four seconds; and gradually as he flexed them as quickly as he was able, he could soon flex them rapidly and regularly. This peculiarity of movement was to be seen in almost all the voluntary movements of the body; but the muscles of the eyes and larynx and the interossei were not implicated, nor were the acts of defæcation, micturition, or respiration. Upon mechanical stimulation of either motor nerves or muscles, the muscles contracted more readily than normal; the contraction and the relaxation were slower than in health. To the faradaic current the contractions were quantitatively normal; but they lasted some seconds, and relaxed slowly. The same was true of the contractions induced by galvanising the nerves. The galvanic reactions of the muscles showed the same slow, prolonged contractions, and A. C. C. was in some muscles more easy to obtain than K. C. C. Dr. Hale White exhibited a series of myographic tracings which fully illustrated all these points, and also demonstrated that the latent period of muscular contraction was normal. Sections of pieces of muscle that had been excised were exhibited, and it was seen that the muscular fibres were hypertrophied, that the transverse striation was but little marked, that the line of the sarcolemma was indistinct, that the nulcei were slightly more numerous than they should be, but that there were no vacuoles, nor was there any increase of the interstitial tissue. It was pointed out that this patient had all the characteristics of this disease.

Dr. GEORGE HERSCHELL exhibited two cases of Myotonia Congenita, or Thomsen's disease, from a family of ten children, of whom five had suffered from this complaint. Besides these two, aged respectively twenty-eight and eighteen years, there was a sister, aged twenty-four, who suffered slightly with it, but was now free, a younger sister, aged fourteen, who still suffered from it, and a baby who suffered with it from the time when it commenced to walk until the age of four years, when it died from acute rheumatism with cardiac complications. The case of the sister aged fourteen was much the worst; as slight causes, such as knocking against a stone in the street, or anyone pushing against her, or even a sudden fright would cause her to become rigid and fall down in the street. As regards the family history, neither parent suffered from these diseases; but it was worthy of note that there appeared to be a strong tendency to rheumatism. With regard to the order of birth of the healthy and affected members of the family, commencing from the eldest, there were first two girls healthy, then a male affected, then a healthy girl, then the sister who suffered slightly, then a healthy boy, then a second male affected, then a healthy boy, then an affected girl, and then the baby who was also a subject, and who died at four years; so that it appeared that the healthy and diseased children were very nearly in alternation. These cases exhibited all the ordinary signs of the disease. The first movement of the muscle after long repose was exaggerated and a condition of tonic rigidity remained for nearly a minute after the voluntary stimulus was withdrawn. The muscular rigidity was produced by any sudden movement, particularly in climbing and walking upstairs. The muscles could be easily excited mechanically, and when struck they gave a contraction which persisted for some seconds. The arms and legs were chiefly affected, the jaws very slightly and occasionally, if at all. The patellar-tendon reflex was normal after the stiffness caused by the first movement of the leg had passed off. The affection commenced as a child when the patient first began to walk. As regarded the electrical reactions, he did not think that they were quite correctly given in the text-books. In these cases the K. C. C. was produced with a much weaker current than the A. C. C. Two milliampères were the minimum which produced K. C. C. in the biceps, while five milliampères were necessary to elicit the A. C. C.—Dr. ANGEL MONEY thought the name "myotonia congenita" not a good one; for the disease was not present in intra-uterine life or at birth, but only after the pyramidal tracts were fully developed.—Dr. BEEVOR asked how many such cases were on record.—Dr. HADDEN showed at the Society last year a man aged about thirty-six who exhibited a condition somewhat similar to Thomsen's disease. These cases opened up a wide field for speculation as to how far they were functional in nature.—Dr. HALE WHITE said, in reply, that there were only about fifteen or twenty families on record. He demurred to the term "functional" being applied to this affection, because there were marked changes demonstrable in the muscle fibres.—Dr. HERSCHELL, in reply, hoped that attention would be directed to treatment. It was remarkable that one girl got quite well after marriage.

Mr. HURRY FENWICK showed two cases of complete Epispadias in the adult to illustrate two grades in the severity of the disease. The first patient, aged twenty-three, had had three operations performed upon him in infancy, attempts having been obviously directed to form a sphincter to the bladder, but without result. He had now complete incontinence, and no vesical capacity. A small portion of the bladder wall was proptosed through the deficient neck. In the second case, aged eighteen, there was control over the bladder, and the patient could retain urine three hours, ejecting it in a strong and steady stream to an amount varying from half to one pint. This patient was also operated upon in infancy, the surgeon having attempted to form a roof to the urethral gutter.

Mr. WALTER PYE showed a case of internal Derangement of the Knee-joint. The patient, a bootmaker, aged twenty-

four, in the summer of 1889, gave his knee a wrench, and after this he became liable to sudden attacks of pain, either when going down stairs or making other movements of extension. The subjective sensation was described as being as if something slipped out, and firmly grasping the knee generally put matters right enough to enable him to walk. The accident was getting very frequent, sometimes three or four times a day, and his knee was never free from some pain. It was, however, never very acute. The patient was watched to see if there was any change in the appearance of the knee when he thought the cartilage was out, but nothing very definite was to be made out, this being partly due to his habit of instinctively pressing the knee and making the movements which, by experience, he had found were efficient to restore the joint to its ordinary condition. A vertical incision, an inch and a half long, three-quarters of an inch away from the inner border of the patella, and with its centre corresponding to the tibio-femoral line, was made down to the joint. The internal cartilage was found separated at its anterior attachment and along the margin, being displaced into the centre of the joint. It was irregular, thickened, and crumpled. It could with difficulty be brought up with the forceps to anything like its proper position, and it did not seem feasible to obliterate its folds or get it fastened in its place. Almost the whole of the cartilage was then removed from the posterior attachment by the scalpel, there was very little trouble on taking it away and almost no bleeding. The joint, which had only one little blood-clot in its cavity, was syringed out with 2 per cent. perchloride of mercury solution. A small drainage-tube was inserted within the lips of the incised synovial sac, which were not stitched together. The lips of the wound were closed by fine sutures, and the whole part was dressed in an aseptic manner. The after-history was that the patient suffered hardly any inconvenience from the operation; the wound was not dressed for a fortnight, and when looked at was soundly healed (the drainage-tube had worked out). He had now perfectly free movement, and but rarely any tenderness in the scar. His former symptoms had disappeared.—Mr. HERBERT ALLINGHAM had found twenty-three of these cases on record. Eleven of these had parts of cartilage removed, while in the remainder it was sutured to the head of the tibia. He advocated this procedure as preferable to wearing a knee truss, which was cumbersome and uncertain in its action. He thought the synovial membrane should in all cases be carefully sutured after the operation.

Dr. ANGEL MONEY exhibited a child twenty-one months old with an Instrumental Indentation of the Left Frontal Bone. The indented area was saucer-like, and measured one inch and a half by one inch and a half. There were no intellectual, emotional, motor, sensory, or trophic symptoms to be ascribed to the lesion, which the mother felt certain was done at birth by means of instruments. The child was rather above the average intelligence for this time of life.

Dr. ANGEL MONEY also showed a man, aged fifty, with the following conglomeration of signs and symptoms: Double aortic disease, fibroid tortuous arteries, excessively high arterial tension, staggering gait, amblyopia, incipient optic nerve atrophy, increased knee-jerks, right ankle-clonus. The exhibitor opined that the nervous lesions might be secondary to the arterial disease. The man had worked for many years in lead, and there was a lead line on the gums. Syphilis, lead, alcohol, and gout were spoilers of arteries, and caused sclerosis of these structures and of the nervous tissues. Dr. Money believed that the doctrine of collocation of function and structure should receive wider application; probably tracts of similar function suffered frequently together from the same sets of causes. The bloodvessels probably frequently led the way to nervous diseases. The aortic disease might be due to perforating ulcers of the aortic valves—a favourite term with some French authors.—The PRESIDENT had seen several cases with this curious state of arteries. In one instance, which proved fatal from apoplexy, the lesion was regarded as a paralysis of the vaso-motor nervous system.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Treatment of Strumous Glands.

AN ordinary meeting of this Society was held on Jan. 3rd, the President, H. Campbell Pope, M.D., in the chair.

Mr. BERTRAM THORNTON (Margate) read a paper on Operative *versus* Therapeutic Treatment of Strumous Glands. He alluded to the records of the last fifty years at the Royal Sea-bathing Infirmary, Margate, which testified to the unsatisfactory and tedious methods of treatment prevailing up to within the last few years. Having reviewed the various modes of treating enlarged glands in their different stages, such as erosion, by poultice, iodine paints, mercurial ointments, calcium sulphide, &c., injections of various drugs, and applications of strong caustics, he pointed out that whatever action these methods had in the diseased glands, the process was very tedious and uncertain, and the resulting scars most unsightly. An operative experience of about a hundred cases of various degrees of magnitude led him to urge the excision of every enlarged gland or part of a gland after a reasonable period (say, six or eight months) of constitutional treatment and change of air to the seaside. Modified operations, such as scooping, aspiration, small punctures with drainage, were nearly always unsatisfactory, as diseased gland tissue was left behind. Hitherto he had, fortunately, had no death or serious complication to record, and the vast majority of cases had healed rapidly. He claimed for the method of excision that many months of tedious treatment were saved, the resulting scars were less unsightly, and that the operation, if performed with skill and care and in good hygienic surroundings, was usually satisfactory.—The PRESIDENT asked if tuberculosis had not been found to follow operations for the removal of glands, and whether there was not danger of the disease spreading in other organs.—Mr. EDWARDS agreed about the importance of drainage, and thought that this should be done not only by horse-hair and catgut, but by drainage-tubes.—Dr. ALDERSON said he would sometimes use hot fomentations with poppy water if there was no doubt that an abscess in a gland would have to be opened.—Mr. KEETLEY thought that when a chronic enlargement of a gland, not syphilitic persisted in spite of sea air &c., the sooner it was excised the better, and that the dangerous and difficult cases were those in which the radical treatment had been procrastinated.—Mr. LLOYD thought it remarkable that the cases mentioned should have healed so rapidly, considering what their constitutional disease was.—Dr. ECCLES pointed out the influence the air of Margate must have had on the course of the cases.—Mr. THORNTON made some remarks in reply.

Mr. KEETLEY described, with diagrams, a mode of amputating at the ankle-joint for intractable circular ulcer of the leg, in which the skin and deeper soft tissues of the dorsum of the foot were transferred to the back of the leg, as well as the sole of the foot to the shin (as in the case published by him in November, 1885).

Mr. PERCY DUNN showed a pathological specimen of a Perforating Wound of the Heart caused by a Fractured Rib; also an Enlarged Lateral Lobe of the Prostate with Ulceration.

Dr. CLEMOW showed the Meninges of a Brain with Intermeningeal Hæmorrhage.

MEDICAL OFFICERS OF SCHOOLS' ASSOCIATION.

A GENERAL MEETING of this Association was held at the rooms of the Medical Society in Chandos-street, on Jan. 15th, the President, Sir William Savory, Bart., in the chair. The proceedings commenced with a discussion of the question as to the advisability of the return of boys to the public schools at the usual time, in view of the still prevailing epidemic. It was generally admitted that schools situated in London, and perhaps in some other large centres of population, occupied a somewhat exceptional position in this respect at the present time; and, indeed, it was understood that some such establishments were practically unable to meet the requirements of ordinary school life, owing to the prostration of a large proportion of the staff of servants &c. by influenza. On the other hand, it was felt that the extension of the holidays by a week or so only could, in the case of schools situated in country districts, not be expected to have much effect in the way of preventing the introduction of the malady, or even its development into epidemic proportions; and it was stated that this was the decision which the authorities of the great majority of public schools had already adopted. The following resolution

was then agreed to:—"Having regard to the prevalence of epidemic influenza, this meeting of the Medical Officers of Schools' Association does not, under present circumstances, consider it necessary or advisable to recommend an extension of the holidays in the case of public schools situated in the country."

A paper, freely illustrated by models and diagrams, on the Care of the Teeth in Childhood was then read by Mr. Francis Fox; it was followed by an interesting discussion, in the course of which the unanimous opinion was expressed as to the necessity for the teeth of all school children being kept under the continuous supervision of skilled dental surgeons. The meeting terminated with a cordial vote of thanks to Mr. Fox for his valuable paper.

CLINICAL SOCIETY OF MANCHESTER.

AT the meeting on Jan. 21st, Dr. Simpson, President, in the chair, Dr. Owen mentioned two fatal cases of Angina Pectoris, Dr. Buckley showed a Vesico-vaginal Calculus, and Mr. Wright mentioned some cases of Thyroid Dyspnœa.

Chronic Phthisis.—Dr. T. HARRIS exhibited a case of very chronic phthisis, which clinically resembled true fibroid phthisis; but tubercle bacilli were found in the expectoration after seven specimens of the spectrum had been examined with negative results. The phthisical affection was a unilateral one, but involved the whole of the right lung from apex to base. Dr. Harris considered that the term "fibroid phthisis" should be reserved for the small class of phthisical cases where we had fibroid changes in the lung, and where such changes did not result from tuberculosis of the organ, but from simple inflammation. Cases of very chronic tubercular phthisis, such as the case exhibited before the Society, sometimes resembled exceedingly closely true fibroid phthisis, and the only certain method by which we could decide whether a case was one of true fibroid phthisis or of very chronic tubercular phthisis was by the repeated examination of the sputum for tubercle bacilli.

Russian Influenza.—Dr. WAHLTUCH made some remarks on Russian influenza, and read the notes of two typical cases lately observed by him in Manchester. 1. Miss B——, aged twenty-five, on January 2nd, at 4 P.M., suddenly had a shivering fit, pain in occiput and epigastrium, general muscular pains, temperature 104°, sneezed several times, and vomited once. The fever lasted four days, temperature varying between 100° in the morning and 102° in the evening, and lastly falling suddenly to 98°, when she felt very weak. There were no catarrhal symptoms, and she made a good recovery in a fortnight. The treatment consisted of quinine and ammonia in frequent doses, and orange juice as a drink during the fever. 2. Mrs. C——, aged sixty-seven, was similarly attacked on Jan. 13th, temperature at the onset 104°; on the following day signs of broncho-pneumonia set in, and she died after four days' illness from collapse, when the temperature from 104° suddenly fell to 98° and lower. Dr. Wahltuch believes he could trace the infection to letters received by his patients from their friends in London, and who wrote the letters whilst suffering from the Russian influenza.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

A MEETING of the Medical Section was held on Dec. 13th, 1889.

Extra-pleural Abscess simulating Empyema.—Dr. W. SMITH related the case of a gentleman, aged thirty years, who consulted him on Oct. 20th, 1888, for a severe pain in the right side, attended with pyrexia and general ill-health. The pain had suddenly set in six weeks previously. The signs seemed to indicate a right pleural effusion, with tenderness along the eighth and ninth ribs. Pus was detected by hypodermic puncture, and when the abscess was opened about a pint of fetid sanious pus escaped. The rib was found necrosed. Hectic fever supervened, and the patient sank at the end of three months. The post-mortem examination disclosed an enormous cavity in the wall of the thorax, fragments of several necrosed ribs from the seventh rib downward projecting externally. Right lung partially adherent; no fluid in either pleural sac. Heart and pericardium healthy. The abscess had further destroyed the right half of the diaphragm. The abdominal viscera were healthy, and there was no diffuse peritonitis.—The CHAIRMAN (Dr. James Little) said he had seen the case in question at an early period of the patient's illness. He did not think that the diagnosis Dr. Smith had made could have been more precise and accurate.—Dr. JOHN WILLIAM MOORE desired more information as to the distribution of the dulness on percussion over the right side of the chest, because in the text-books there was a distinction drawn between the arched dulness on percussion, due to the liver being displaced upwards, and the horizontal line caused by any form of fluid effusion into the pleura.—Dr. R. A. HAYES remarked that in people lying for some time in bed after the occurrence of the pleuritis the fluid became encysted, so that the position did not afford much assistance in diagnosis.—The CHAIRMAN said that, having regard to the good results which he had himself several times observed from the removal of ribs in empyema, and in the light of the post-mortem examination, three of the ribs might have been taken away.—Dr. WALTER G. SMITH, in reply, regretted that the bolder course had not been adopted. Two reasons deterred him from taking that course—uncertainty as to the seat of the abscess, and the fear that excision of the ribs would give rise to septicæmia.

Case of Empyema treated by the Radical Method.—Dr. R. A. HAYES read notes of a case of empyema. The patient was a constabulary recruit. The case recorded was suspected to be tubercular, but no tubercular bacilli could be detected in the sputum. The fluid after three months became purulent, a free incision was made by Mr. Hamilton, and the patient was now quite convalescent.—Fleet-Surgeon FFRENCH MULLEN asked why Dr. Hayes did not tap his case whilst in the first stage of pleuritic effusion, instead of waiting till suppuration had commenced.—Mr. F. T. HEUSTON thought that in cases where incision was necessary it was of prime importance that the proper place should be selected. He preferred to make the incision in the scapular line or posterior to it, as low down as possible, selecting the eighth intercostal, but keeping above the diaphragmatic attachment to the ribs, this being the most dependent position and allowing the most satisfactory drainage.—Dr. A. W. FOOT said that what he did in cases of pleural effusion was to draw off the pus with an aspirator, wash out the pleura, using a warm solution of iodine, but never anything else, unless fetor arose as the indication for special treatment.—Dr. PATTESON thought there was too great a tendency on the part of surgeons to open the pleural cavity. One of the largest cases of pleural effusion he had seen was cured by a single aspiration. But surgical interference was no doubt beneficial in those cases where the lung had become incapable of expanding.—Dr. WALTER G. SMITH said the result of his experience was unfavourable to the radical cure. The cavity had three sides, and it was impossible to close it except by the expansion of the lung, or by the falling in of the chest, or by the rising of the diaphragm. There must always be a large margin of unsuccessful cases, and it should be remembered that the first who taught the profession to deal differently with those cases—Dr. Trousseau of Paris—was not a surgeon, but a physician. It was not waste of time to aspirate before proceeding to the so-called radical method.—Dr. DOYLE always took antiseptic precautions when "tapping" the chest.—The CHAIRMAN entertained no doubt that under the new method there were more recoveries than under the old, and that the additional surgical means of rescuing patients from death, immediate or remote, placed the physician in a better position than ever. The difficulty was to hit the proper medium—neither to be too timid on the one hand, nor too rash and eager on the other. Nobody could be too cautious in introducing even a small needle of a syringe into the pleural sac. He never did so himself without heating the needle in a spirit-lamp and afterwards anointing it with carbolic oil, and he always used a fresh needle. It was not desirable to introduce a needle into the chest more frequently than could be avoided; but he had to reproach himself rather for abstaining from than for using it too frequently, as he believed that with proper precautions it could be used without danger.—Dr. R. A. HAYES, replying, said he always tapped himself where that operation sufficed, and he was scrupulously careful about the condition of the aspirator and of the needle in making diagnostic punctures. But he drew the line at the scalpel, and felt it right, where it came to the use of the knife, to call in an operating surgeon.

Reviews and Notices of Books.

Hunterian Lectures on the Morbid Anatomy, Pathology, and Treatment of Hernia. By CHARLES BARRETT LOCKWOOD, F.R.C.S., Hunterian Professor, Royal College of Surgeons of England; Surgeon to the Great Northern Hospital; Senior Demonstrator of Anatomy and Operative Surgery in St. Bartholomew's Hospital. Thirty-six Illustrations. London: H. K. Lewis. 1889.

NOW that operations for the radical cure of hernia are widely practised and boldly advocated by prominent surgeons in all civilised countries, it has become more important than ever to determine the actual pathological causes of this common disease; and Mr. Lockwood was therefore well advised to devote his Hunterian lectures to a consideration of this problem—for problem it is. Many writers have discussed it; and men of equal weight and authority have taken diametrically opposite views of the seat of the primary lesion in abdominal hernia. Mr. Lockwood has made a careful study of the length and position of attachment of the mesentery and transverse meso-colon, as well as of the range of mobility—the excursion—of the intestines, in a number of cases of persons of all ages who have been free from hernia and of others who have suffered from hernia. These lectures are founded upon the results of these observations, and, leaving aside smaller details, the doctrine advanced is that there is a possibility of hernia in everyone; that "elongation" of the mesentery or omentum is not a cause of hernia, but that "prolapse" of the mesentery and transverse meso-colon—that is, an acquired descent of the roots or attached borders of these structures—is a very important cause of acquired hernia. The origin of this prolapse is sought in the changes incident to age, weakness of the suspensory muscle of the mesentery, relaxation of the peritoneum, and the effects of repeated pregnancy. The practical bearing of this view upon the radical cure of hernia is obvious. Those cases which depend upon some congenital defect in the abdominal wall are best suited for operation, for the surgeon, if successful, can remedy the entire defect. This is well known, and has been shown by the statistics of several operators, but Mr. Lockwood has given the anatomical confirmation of a clinical fact. There are many minor facts of considerable interest scattered through these lectures, but we fear the number of readers will be smaller than their merit deserves, for the style is somewhat wanting in lucidity, and the work is certainly tough reading. Many of the illustrations are not very successful, and our pleasure in reading has not been enhanced by finding the third part of the small intestine invariably called the ilium (*sic*).

Injuries and Diseases of Nerves, and their Surgical Treatment. By ANTHONY A. BOWLBY, F.R.C.S. London: J. and A. Churchill. 1889.

THIS work will be read with much interest alike by surgeons, neurologists, and physiologists. It includes the Jacksonian Prize Essay for 1882, the Astley-Cooper Prize Essay for 1886, and the lectures delivered in 1887 at the Royal College of Surgeons, a report of which appeared in these columns.

In the opening chapters Mr. Bowlby gives a very clear and concise account of our present knowledge of the physiology of the nerves, and of the histological changes of degeneration and repair, which occur after section of them. He then describes minutely the tropic changes—e.g., glossy skin, ridging of nails, &c.—which follow nerve injury, this chapter being illustrated by numerous drawings of these conditions. The symptoms of nerve injury, particularly of nerve section, are next considered. Mr. Bowlby confirms the observation that in many cases of complete section of a nerve sensation is not absolutely lost, owing, in all probability, to the anastomosis of nerves. Consequently he reminds us that in the absence of other signs of regeneration "a simple return of sensation does not afford sufficient proof of new nerve formation." The account of the symptoms of special nerves is very full and complete. In considering treatment Mr. Bowlby first of all dissents from the statement of Weir Mitchell that the capacity of nerves to remake their lost parts is almost invincible, maintaining, on the contrary, from the experience of himself and others, that "in the vast majority of untreated nerve wounds, either no union at all, or but a most imperfect one can be expected." In all cases therefore primary nerve suture is recommended. No bad results have been traced to the operation itself, and function is usually restored within a year, although there is often a long interval before there is much evidence of its return. "No case should be considered as hopeless till after the lapse of two or three years, and not then if any improvement is in progress." In cases of secondary suture also it is found that in the great majority of cases recovery ultimately ensued, even when the suture was practised some months after the division. This prognosis is more favourable than that of most authors, probably because Mr. Bowlby was at the pains to follow up the cases which left the hospital unbenefited, and he found that in many of these complete recovery ultimately took place. No explanation is hazarded of the almost immediate and permanent return of sensibility which frequently occurs after nerve suture. The interest and practical value of this section are greatly increased by abstracts of fifty cases of nerve suture performed in the wards of St. Bartholomew's Hospital.

A chapter is devoted to so-called "Reflex Paralysis." The cases quoted, mostly from other authors, do not to our minds justify the name employed, the causal connexion between the peripheral injury and the paralysis being in most very doubtful. Nerve stretching and its numerous recent applications are then described. The dangers of the operation are shown, and cases are quoted from the writings of various surgeons to show its effect in many chronic nervous diseases. Except in the case of neuralgia (to which a special chapter is devoted), these are far from encouraging. The book concludes with an account of non-traumatic neuritis from constitutional causes, and of multiple neuritis, in which, however, there is very little that is fresh. The book is written throughout from a practical point of view. A very large number of clinical records of cases that have come under Mr. Bowlby's own observation are quoted in detail, and where his own observations have been limited he has added many from current periodicals and from well-known works, such as those of Buzzard, Weir Mitchell, and others. The book is written throughout in a particularly clear and pleasant style, and the numerous illustrations are admirably executed. It will amply repay a careful study.

OUR LIBRARY TABLE.

Die Albuminurie in Physiologischer und Klinischer Bedeutung, und ihre Behandlung. Von Professor Dr. H. SENATOR. Zweite Auflage. Berlin: A. Hirschwald. 1890.—The first edition of Dr. Senator's monograph is known to the English reader in the translation published by the New Sydenham Society. The work has been thoroughly revised by the author, who has added to the first chapter an interesting, though brief, description of renal tube casts and their significance. Their presence, he says, always indicates true albuminuria, and in the rare cases of hyaline casts without albuminuria they point to circulatory derangement in the kidney. A new and valuable chapter is that upon treatment, in which a bland non-nitrogenous

diet is insisted on, the value of milk being especially praised. The harmfulness of alcohol to the subject of nephritis is pointed out, as is also the habit of tobacco smoking, which, carried to excess, is, in Professor Senator's opinion, responsible for some cases of chronic Bright's disease. Reference is made to the conflicting statements upon the effect of albuminous food (e.g., eggs) on albuminuria, and it is shown that a negative result, as observed in some experiments, does not prove that it is without influence, but only that in chronic diseases the kidney may sometimes not respond so readily to irritants, and he holds that the evidence on the positive side outweighs such negative experience. He also emphasises the importance of carefully regulating the amount of physical exercise according to the form of the nephritis, the value of warmth, and in some cases of climatic resorts. There is scope for further amplification of this part of treatment. Of the rest of the work we can only refer to the admirable exposition of physiological albuminuria, and the proofs of the double function of the kidney (a filter and a secreting organ) as being models of terse and clear scientific argument.

Manual of Obstetrics, Gynæcology, and Pædiatrics. By KENNETH N. FENWICK, M.A., M.D. Kingston, Ontario: Henderson. 1889. — This is an interleaved syllabus of the author's lectures, and may be useful to those attending his course, especially if the interleaving is utilised. The danger of these books is that students sometimes attempt to cram from them without reading the subject. This is not, however, we feel sure, the author's intention. The contents generally meet with our approval, but there are too many clerical errors, especially in proper names.

Atlas der Bakterienkunde. Von Dr. CARL FRAENKEL und Dr. R. PFEIFFER. Fünfte Lieferung.—This part of an interesting undertaking—viz., the production of microphotographs of all varieties of bacteria—contains plates of the hay bacillus and its cultures; of the bacillus of malignant œdema and that of tetanus, with tube cultures of these forms. The tetanus bacillus is shown bearing spores at the ends of the rods, giving this microbe a peculiar and characteristic appearance. The Atlas is accompanied by a short descriptive text, which is printed in small type beneath the description of each plate. The excellence of the micro-photographs observed in the earlier parts of the publication is fully maintained.

The New Sydenham Society's Lexicon of Medicine and the Allied Sciences. By HENRY POWER, M.B., and LEONARD W. SEDGWICK, M.D. Part XVI. (Lin—Mao).—We are pleased to welcome this further instalment of a work which cannot fail, when completed, to be of immense value alike to medical authors and the profession in general. We have in former notices given our opinion of the worth of this Lexicon, and gladly accept the reference made to the work by the hon. secretary, Mr. Jonathan Hutchinson, in his letter to us on Jan. 11th, as an indication that its progress towards completion is likely to be somewhat more speedy in the future than it has, for probably sufficient reason, been in the past.

Grand Canary; its Climate and Springs. By J. CLEASBY TAYLOR, M.B. Pp. 16. Leicester: Richardson and Co. 1889.—This is a reprint of a paper read at the meeting of the British Medical Association at Leeds in August. It gives a record of the results of meteorological observations taken at Las Palmas, Grand Canary, from October, 1888, to May, 1889, with some observations on the climate of the Canary Islands as a health resort. The period was too short to admit of the results being thoroughly satisfactory, and the winter was said to be an unusually bad one, but they may be useful in forming a general opinion of the climate. Instead of lauding it as the place to which all invalids should resort, Dr. Taylor has pointed out clearly the classes of cases for which it is unsuitable. These seem to be cases in acute stages and far advanced in any disease, especially phthisis, those with a sluggish action of the portal system, and particularly with any cardiac weakness, and persons liable to diarrhœa. He gives some very good rules to be observed by invalids, especially with regard to avoiding exposure after sunset, over-exertion, and improper diet. The latter appears to be somewhat difficult, owing to the alleged indifferent quality of the hotels at Las Palmas. He states that a new hotel outside the town was to be opened this winter, which may somewhat remedy this defect. He does not mention, however, whether any improvement has been made in the water-supply, which was reported in 1878 by Dr. Marcet to be very deficient.

Madeira and the Canary Islands: a Practical and Complete Guide for the Use of Invalids and Tourists. By A. SAMLER BROWN. Pp. 111. London: Sampson Low and Co. 1889.—This appears to be a very good guide-book, giving a brief but clear description of each of the islands, and of the excursions which may be made in them by tourists. It also gives a general account of the climatic conditions, water-supply, and hotel accommodation. The last is very indifferent and unsuitable for invalids except at Funchal in Madeira, Santa Cruz, La Laguna and Orotava in Teneriffe, and Las Palmas in Grand Canary. In some of these places new hotels have been built with every convenience for invalids, and are under English management. The author spent a winter at Puerto Orotava, and derived great benefit from it. There are good maps of all the islands. A good index would add to the value of the book.

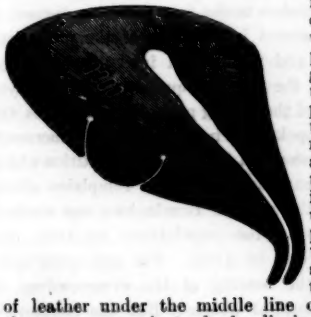
James Vraille: the Story of a Life. By JEFFERY C. JEFFERY. Two Vols. London: W. H. Allen and Co.—We do not ordinarily review novels, but there is much in this one to interest medical men generally, and army surgeons in particular. One noteworthy feature is the simple character of the extracts forming the mottoes on the title-page, and another the graceful and touching dedication. There is not a dull page in the book, and some parts of it are remarkable for force and fidelity of description—so vivid that one is tempted to think the author must have witnessed something of the kind. The hero is a combination of opposite qualities of character: he is emphatically a big, brave man—"a soldier from the crown of his head to the sole of his foot"; but "in the rut of every-day life," amid a crowd of self-seekers and busybodies, he is simply nowhere. He has great self-reliance, little or no self-assertion; simple, shy, and eager as a child, tender and sympathetic as a woman, he has nevertheless the strength, courage, and fortitude of a thorough man under trial and affliction and in presence of the enemy. He marries a woman, beautiful in person, but of unlovable, unsympathetic character, weak and conceited, and thereby introduces a vein of tragedy into his life which influences it, even dominates it, to the end. The character of an army surgeon is introduced, who proves to be his true comrade in the field and his faithful friend and admirer all through. The description of the growth, development, illness, and death of a child from diphtheria indicates singular accuracy of observation and delicacy of expression. The nurse, too, with her rugged unprepossessing exterior and honest warm heart, is a well-drawn character—perhaps the best in the book. "James Vraille" will probably prove a very popular book of the kind with the medical profession; anyway, we should advise our readers to include it in their list of books, and to read it and judge for themselves.

SANITARY IMPROVEMENTS IN HYDE. — A new sewerage scheme for the borough has been decided upon by the Town Council, and an application is to be made to the Local Government Board to sanction the borrowing of £12,000, the estimated cost of the works.

New Inventions.

PATTISSON'S CYCLE SADDLE.

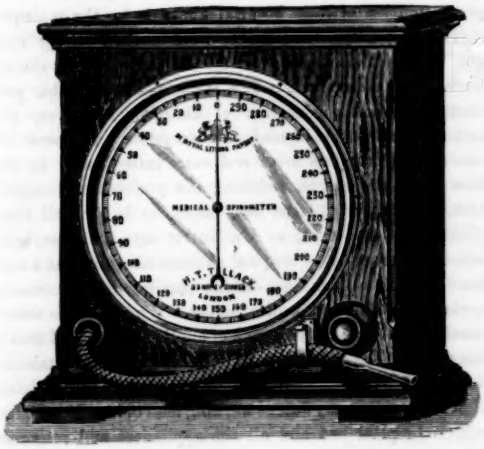
I ENCLOSE an engraving of Captain Pattisson's Cycle Saddle for the relief of perineal pressure, the one which I mentioned I had ridden for a year, and found that it practically does away with perineal pressure. It will be seen that it is open in the middle line in front, and that each side of the saddle is fixed in front to one part of a bifurcated iron support; this bifurcated arrangement prevents the thighs compressing the sides together, so that actually the middle line of the perineum rests within the open space, and is not exposed to pressure; all other saddles I have tried which are open in the middle line are united in front at one point, in consequence the thighs press the sides together, and tend to form a ridge of leather under the middle line of the perineum, and thus press more instead of relieving the pressure. Perineal pressure is a cause of so much suffering and inconvenience to cyclists that I venture to send this engraving and note for publication. The saddle is, I understand, to be exhibited at Messrs. Foley & Webb's stall at the Cycle Exhibition at the Crystal Palace next week.



E. D. TOMLINSON, M.D.

MEDICAL SPIROMETER.

WE have had an opportunity of testing this instrument, and find that it affords an accurate, ready, and simple means of ascertaining the cubical capacity of the lungs. As will be seen by the illustration, its external construction resembles a dining-room clock. The workmanship it displays is of a high character, which, together with its ornamental appearance, renders it an article of furniture well fitted to adorn a well-appointed consulting room. This spirometer will doubtless prove of service to physicians as a convenient aid to diagnosis in diseases of the chest.



WHOLESALE LEAD POISONING AT SHEFFIELD.

To the Editors of THE LANCET.

SIRS,—Your observations in THE LANCET of Jan. 18th on the dangerous state of affairs existing at Sheffield, involving the health and lives of such a number of human creatures by that terrible malady, poisoning by lead, induce me to send you an analogous case which I came across in my wanderings some years ago.

In 1840 I was a passenger in the ship *China*. We put into the Cape of Good Hope to refresh and take in water. After a time at sea a large number of the crew and passengers exhibited the ordinary symptoms of lead poisoning, some, as a matter of course, more severe than others. It was apparent, on investigating the matter in company with the ship's surgeon, that the water was contaminated. Contrasted with the water of the Thames, which we had on starting, and which at first was not fit for ordinary use in its natural state until after it had fermented and settled down sweet, the water which we obtained at the Cape was tempting, and in the warm weather that prevailed more of it was consumed, doubtless, than otherwise would have been. After holding a council of war as to the cause, we arrived at the true source of the evil. It appeared that the water at the Cape which supplied the shipping in those days came down in rivulets from the verdure-clad slopes of the ranges of Table Mountain, which were studded towards the bottom with vineyards; thence it was conveyed in pipes, partly leaden, to the piers, and thence into the ships. It came out that the vine people were accustomed, as farmers generally are, to throw into the pits and on the banks of the streams adjacent the vine stalks and remains of the vintage, which decomposing, acetous fermentation was set up, and, impregnating the water in its rapid descent, would dissolve quantities of lead, forming the soluble acetate of lead, and also the more deadly carbonate of lead. Such was the history and the solution of the alarming phenomena. As you truly say, the victims of lead poisoning pass a long incubative period whilst the poison is being deposited, and it is not till the system is saturated, or a larger dose than usual is absorbed, that the definite symptoms are produced. That is true of poisoning from carbonate of lead, but in our case the symptoms were immediate and acute, the agent being the more soluble acetate. The generation of the acetic acid would vary with the seasons; when hot and moist and in autumn it would be in greater quantity. Fortunately our supply of Thames water had been large.

On perusing your suggestive remarks, it struck me that it was my duty to give you briefly the above case, which, though occurring fifty years ago, is as vivid in my mind as when it happened. Perhaps the Water Committee of the Town Council of Sheffield may trace the contamination of their water-supply to acids from some of their factories, or from "decayed leaves, rushes, and weeds," as you suggest, which in these past few years of excessive, and, indeed, rank and morbid vegetable growths under our highly surcharged electrical atmosphere, as in deleterious insect life, may have been developed into increased and even virulent activity when coming in contact with the so soluble metal as lead. Truly on all sides, and in these last days of the world's agony, "there is death in the pot," requiring all our energies and researches to discover the handful of "meal" appointed of God to alleviate, if not to stave off, the lurking microbe. I am, Sirs, yours truly,

T. W. CHRISTIE, M.R.C.S. Eng.

Ash House, Broad-green, Liverpool, Jan. 21st 1890.

FOOTBALL CASUALTIES.—At a football match at Penarth on Saturday, between Penarth and Newport, a man named England sustained a fracture of the thigh. During a match on the same day, between Armley and Outwood, several accidents occurred to the Armley team. J. Oddley fell and dislocated his arm in two places, Whittaker severely sprained his ankle, while two other members were more or less injured about the head and face. Two men (one from each team) were expelled for rough play.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 1, 1890.

So far, the results of the Birmingham Conference on Hospital Abuse are not very satisfactory. The opening note struck by the Mayor was not in good tune. There was a want of earnestness and interest about it, and a seeming disposition to throw a damper on the whole inquiry. This is not the kind of contribution to be expected from the chief magistrate of a place like Birmingham towards the elucidation of a subject of enormous consequences to the people, to hospitals, and to the medical profession. We are quite willing to believe that the Mayor did not intend to be discouraging, and we shall look anxiously for the exertion of his personal influence to make the future of this agitation in Birmingham more effective and original than the beginning of it has proved. Birmingham is nothing if she is not original, and we are persuaded that if her spirited citizens undertake to investigate this subject thoroughly, they will do much better than reproduce the statistics of Manchester and London. Birmingham has a reputation in this very matter, and is constantly quoted as an illustration of the view that the working classes have a deep appreciation of hospitals and of the kindness and benefits received in them. We shall adhere to this belief, though lately the view has been somewhat shaken both in Birmingham and elsewhere by an apparent tendency in the working classes to use hospitals in a vulgar and selfish sort of way—not for great and rare and truly charitable purposes, but for the ordinary ailments and diseases of life that arise as a matter of course, and for which every honourable self-respecting working man should provide out of his own means as he provides his daily bread, not to say his daily beer. We say *apparent*, for we gladly accept the statement of Mr. BULL, one of the representatives of the Hospital Saturday Fund at the Conference, that not three in fifty of the men who subscribe to the Hospital Saturday Fund use the hospitals for their own purposes. This is a most interesting statement, which we receive in perfect good faith, and which it will be a very important duty of the committee to be appointed by the Mayor to investigate. Even if it should be found that Mr. BULL'S statement is erroneous, and that he has under-estimated the extent to which hospital accommodation has been abused in Birmingham, we shall still believe that he rightly represents the working-classes as not intending that their charitable contributions to hospitals shall be regarded as provident payments to a sick fund or a provident dispensary. The difference in the two institutions needs only to be explained to be understood by the British workman, who can be as charitable as the higher classes in proportion to his means. But Mr. BULL'S statement is entitled to careful investigation, and will no doubt receive it at the hands of the Committee to be nominated by the Mayor.

The speech of the occasion, from the medical point of view, was that of Mr. PRIESTLEY SMITH. And it would be difficult to have put into such space a more clear and dignified statement of the facts as they present themselves to a medical man. And, after all, an enormous responsibility rests on medical men in regard to this question. They are confronted with it every hour as business men are not. They are large factors in it, both in the way of service and in respect of the intelligent criticism they have brought to bear on it for more than a quarter of a century. Their record of generosity is brilliant beyond that of any other set of men; so that they can say what they think without fear of the easy charge of selfishness. Some objections have been taken to the fact that this discussion has been largely promoted by members of the profession, as if their personal and professional interests dominated their whole view of the hospital question. The Mayor would probably regard the closing part of his speech as the most effective. He spoke as if he felt that in the increased numbers of the profession and the keener competition which it implies lay the explanation of this complaint about hospitals. In 1855 there was in Birmingham one medical practitioner to 1825 of the population; in 1876, one to 1919; in 1890, one to 1596. We are quite prepared to consider the bearing of the overcrowding of the profession on hospital abuse. But the suggestion of the Mayor that this is a chief explanation of the evils complained of will not bear close examination. And this for two reasons. The competition in the profession, like competition everywhere, tends to cheapen service, to make medical practitioners more accessible and procurable at moderate rates, and therefore to lessen the excuse for increased use of hospitals by the working classes. In olden days a respectable and sober working man was a good patient, and would have his wife and children well attended for a very modest sum by any practitioner he chose to have. There were plenty such in every locality, and no patients were more respected by good practitioners. There are a few such yet. And the great solution of this hospital abuse is in the multiplication of private relations between such working men and the profession. The means of the working classes have much improved. The competition of the profession favours moderation of charge. Moreover, the improved education of medical men renders the need for recourse to hospitals more and more infrequent. In the face of all these facts, including the professional competition, the Mayor will see how enormous is the evil complained of—viz., that, as Mr. SMITH says, and everybody admits, the number of hospital patients has grown at a rate fourfold greater than that of the population. Mr. SMITH spoke of the risk of a medical strike. We confess to seeing much more imminently the risk of another strike, and that is the strike of the subscribers to hospitals. Our hospitals are voluntary charitable institutions, and there is a rare satisfaction in providing any decent working man or his wife or child with a hospital bed and all the appliances and resources of modern surgery and benevolence. But hospital charity is discouraged by hospital abuse. There are grave proofs that charity has been seriously chilled by the charges already made. The whole country will look anxiously to Birmingham for the report of the committee to be appointed. We do not want a mere echo of Manchester methods. There, as Dr. RENTOUL showed, in the provident dis-

pensaries the wage limit has been abolished, and the provident dispensaries may grow to as great an abuse as the hospitals. There is every element for a good critical report, and we shall be greatly disappointed if a valuable contribution is not made to the solution of this great question.

THE triumphs of modern science have now become almost commonplaces, and their greatness and utility are matters of universal recognition. While this is as it should be, it is highly desirable that scientific men should sedulously shun any tone savouring of arrogance or omniscience, and that the greatness of the advance in knowledge already achieved should not blind them to the long journey which is yet before the human family. Science has done, is doing, much to unlock the mysteries of this most wonderful and mysterious universe, it is charming secrets from the rocks and the stars, it is ever pushing back the frontier between the known and the unknown; but let us guard ourselves from fancying, even in our most complacent moments, that the nineteenth century has solved all those problems which the wise and great of all ages have desired to look into. Not only more becoming, but truer, is the attitude assumed by GOETHE when he says that "the little that we do know is as nothing compared with that which still remains to be known." We gather a pebble here and there on the margin of the great ocean of truth, but its depths are still unsounded by us.

Foremost amongst unsolved problems must be placed the question of the nature of life. Even to define what we mean by life, much more to explain its true nature, has puzzled the profoundest thinkers. "Life," says HERBERT SPENCER, "is the definite combination of heterogeneous changes, both simultaneous and successive, in correspondence with external coexistences and sequences." This definition is ingenious, and grows upon us as we reflect upon it; but it lacks the first essential of a good definition. It is not "clear." It may be very suggestive and helpful to anyone who already knows what he means by life; but it would probably convey no idea whatever to a mind—if we can conceive one—to which the conception of life was altogether new. It has been objected to this definition that it is as applicable to a steam-engine as to a living organism; and although this objection cannot be strictly maintained, the mere fact that it could be plausibly advanced shows that the definition in question leaves much to be desired. Let us hear ARISTOTLE. "Life," according to the Stagyrite, "is the primary reality of an organism." This definition has been much praised, but it does not seem to take us very far. It is true, but it is inadequate and leaves much unexplained. Perhaps one of the best definitions of life was that given by GEORGE HENRY LEWES—viz., "Life is the connexus of the organic activities." Yet the more we reflect over these and other definitions, the more do we realise that the nature of life remains a mystery, to which we do not yet possess the clue. What modern science has really established regarding life is that it always proceeds from life. "*Omne vivum ex vivo*" is a maxim which the experiments of the last two or three decades have established apparently on an irrefragable foundation.

Next among the unsolved problems of science must be placed the problem of origins, which has so largely dominated speculation in recent times. Whence came this globe on which we live? Whence came man? What was the origin of mineral, of plant, of animal? To answer these questions it may be freely granted that modern science has formulated hypotheses more ingenious, more adequate, and more coherent than those of any preceding age. The Nebular Hypothesis and the Darwinian Theory are not only most subtle and profound, but fairly adequate to the facts to be explained, and they have been supported by a great mass of evidence, put together with commanding ability by some of the master minds of the race. Yet we must admit that they are still hypotheses only, and not demonstrations. In his address as president of the British Association last year Professor FLOWER gave his opinion that the Darwinian theory is an admirable working hypothesis, but that we cannot at present claim more for it. Even if the nebular hypothesis and the Darwinian theory were definitely established they would still leave the problem of origins obscure. They would only push it back. The primary incandescent ether required by the nebular hypothesis and the ultimate atom assumed by the Darwinian theory would still remain awful mysteries, which will probably ever remain obscure.

In the realm of disease unsolved problems abound. We cannot account for the origin of any of that large class of diseases which, so far as we can see, invariably take their origin from a definite particulate virus. We can discover and formulate the conditions of their growth and development, but their original source remains a mystery. Hardly less mysterious is the mode of their propagation. We can conceive pretty clearly the mode in which scarlet fever is conveyed, or typhus, or enteric. When we come to the case of cholera, we find the problem growing more abstruse, and the case of the present prevailing epidemic of influenza is perhaps more difficult still. Yet it is just in this department that the outlook is at present most hopeful. The patient and exact methods of observation and experiment now universally employed have already thrown a flood of light upon the origin and true nature of disease, and there can be little doubt that we are on the verge of other and perhaps even greater discoveries. The genius of a PASTEUR or a KOCH, however rare, is not without its parallel, and the achievements of these observers should make the work of future investigators surer and less arduous. The true scientific attitude, as it appears to us, is one of legitimate satisfaction at past successes, with the frank recognition that this is no time for calling a halt and sounding pæans of victory, but rather for pointing to the distant summits still to be surmounted and encouraging the noble band who, "scorning delights and living laborious days," have preferred knowledge to honour, pleasure, or ease, and have gathered in the first fruits of the great harvest which still remains to be garnered. Arrogance, pride, exultation are unscientific because they show a lack of sense of proportion between what has been achieved and what remains to be done. They are also unscientific because they are hurtful to that spirit of modest, patient, humble interrogation of Nature which has been the method of all great men, of NEWTON, of FARADAY, of DARWIN.

WE have now further information from the local press as to the action of "all the medical men" residing in

the Chippenham urban and rural sanitary districts in having signed a memorial to the Local Government Board, the Wilts County Council, and the sanitary authorities of the county, urging that it is impossible for them to carry out their duties under the Infectious Diseases Notification Act, which is to be, or has been, adopted by the two districts specified, if the services of a medical practitioner who is in private practice, and holds several clubs and other appointments, are retained for medical officer of health purposes. It is now further stated that the medical men in question have given notice to the secretary of the Local Government Board that "as long as the medical officer of health is in practice they will refuse to notify to him; whereas, on the other hand, if he does not engage in private practice, or hold any other appointment, they will willingly co-operate with him." Amongst the arguments used, and which are locally looked upon as the most weighty, the following statement occurs:—

"We need only point out what a serious thing it would be for a medical officer who has just been inquiring into an outbreak of small-pox, diphtheria, scarlet fever, or puerperal fever, immediately on his return home to be summoned to a case of childbirth; these diseases are all mentioned in the notice of the adoption of the Act by the various sanitary authorities, and under the circumstances enumerated would, with an almost certainty, dangerously affect the patient he attended, and perhaps cost such patient her life, more especially with the latter—puerperal fever. So well is this fact known to medical men, that many in private practice cannot be induced to accept a health appointment, that they may not be the means of the communication of disease from infected places to patients they attend, the cause of which it has been their duty to ascertain."

The attitude alleged to have been adopted in this respect deserves very serious consideration. And we would, in the first instance, repeat that we have much sympathy with the main aim of the profession in and about Chippenham to secure the services of a medical officer of health who is not engaged in private practice. But we hope the threat not to comply with the terms of an Act of Parliament so long as conditions which are very general throughout the country are maintained at Chippenham has not in reality been made. Refusal to comply with a statutory obligation can hardly, under the circumstances, favour the desired end. We are also inclined to think that the reason quoted above is hardly such as to carry great weight, and that if it is pressed its application can be by no means limited to medical officers of health. Assuming an "outbreak" of either of the four diseases mentioned, it is, as stated, the duty of the medical officer of health to ascertain its cause. But very little of this work need be done in the sick room. Indeed, there are occurrences of this sort in which the medical officer of health at once accepts the diagnosis of his *confrères*, and, with the aid of the information obtained through them and the relations of the sick proceeds with his work of investigation without ever seeing the patient. If it be necessary for the medical officer of health to see a sick person in order to verify some point, or to elucidate some doubtful matter in the history of the case, the visit is often a solitary one, and it can rarely involve that close and repeated contact with or lengthened examination of the patient which is a real necessity in the case of the practitioner who has medical charge of the case, and who must often be in close attendance upon the sick day by day and even night by night. As a matter of experience, we doubt whether it can be shown that, amongst the several hundred medical officers of health who are in private practice, there has been any special liability to convey infection even where notification has been in operation. Medical officers of health fortunately share with other medical men the very general immunity from this danger; like their colleagues, much of the intervals between their visits is spent in the open air, and, as already stated, there is rarely, even in the case of outbreaks, need for any close or frequent association with the sick. The arguments in favour of debarring medical officers of health from private practice are weighty ones; but we cannot think the one to which we have referred as having been adduced in this case adds to their force.

Whilst on this point we would advert to one other consideration. The objection raised at Chippenham extends to the medical officer of health holding "any other appointment." This, in our opinion, goes much too far. Medical officers of health giving their whole time to their duties are not uncommonly comparatively young men, who early in their professional life elect to follow a public health career, and it has on more than one occasion appeared to us that the complete severance which in a number of cases exists between public health work proper and the experience which can alone be derived from current observation of disease in various phases is to be deplored; and hence there is much to be said in favour of that association of officers of health with public dispensary or hospital posts which already exists in some districts. As to risk to the patients, it should be remembered that the engagements of a health officer are almost invariably quite exceptional in so far as they enable him, if need be, leisurely and without difficulty, to prepare himself by ablutions and change of clothing for contact with the sick. For reasons such as these, we hope the terms of the memorial will be reconsidered.

IN the course of the debate which has been proceeding for some time past in the Academy of Medicine of Paris, and was concluded last week, there has been a republication of curious edicts and rules intended to prevent the spread of tubercular disease amongst members of communities. Thus M. GERMAIN SÉE drew attention to one of these edicts passed over a hundred years ago—namely, in the year 1782, when the King of Naples proclaimed as law: 1. That every physician in practice should be bound rigorously to furnish indications to the authorities as soon as he had discovered phthisis in any of his patients, and if he neglected this announcement should be amenable to a fine of 100 ducats, and in case of repetition of the offence be condemned, without appeal, to banishment for ten years. 2. That the sick, after the discovery that they were suffering from phthisis pulmonalis, should be taken immediately to the hospital. 3. That the directors of hospitals should be

obliged to keep separate the clothes and the linen belonging to the phthisical, with an inventory of all the clothes that had been worn by every individual certified as being tuberculous, and that after the death of such person the director or manager should prove that all parts of the clothes were still present, any infraction of this part of the decree being punishable by imprisonment or even the galleys. 4. That the authorities should be empowered to renew the sick chambers in which phthisical persons had been lodged—that is to say, the flooring of the chamber, the bedclothes, and the hangings of the bed, and should remove and burn the windows and the doors and replace them by new ones. 5. That severe penalties should also be inflicted on those who bought or sold effects belonging to the phthisical. 6. That every house in which a phthisical patient died should be put under ban, and its proprietor be reduced to the loss of it. These proscriptions, M. GERMAIN SÉE said, were only a copy of still older regulations which had been brought into force against the plague in former times; and the same rules were applied in Portugal. In the kingdom of Naples this law was applied in all its rigour until the year 1848, and what was the result? The result generally was an evil incalculable. What was the result to the sufferers from tuberculosis? Nothing. The rigorous application of the law for two or three generations to those who were the victims of phthisis proved that it was without the least effect. No Neapolitan or Portuguese physician could verify the slightest diminution of phthisis during all this time. These, says M. GERMAIN SÉE, are the results of ignorance; ignorance of the laws which govern the transmission and the spread of the most fatal of human diseases amongst civilised nations. And now what is the true knowledge which M. GERMAIN SÉE would have us accept? He himself is as rigorous as the King of Naples ever was in regard to rule and ordinance, only his rule is infinitely simpler, and is one which every nurse could follow without injury or annoyance to anyone, a rule which we hope every English nurse does follow scrupulously. The rule is to do away with the sputum expectorated by the phthisical or to destroy it, then all is said that can be said if this rule be correct. As will be inferred, M. GERMAIN SÉE is a valiant partisan of the school of contagionists. In his eyes heredity as a factor in phthisis plays a very inferior part, and if his points were altogether admitted, the part allotted to it would, at the best, be secondary. Take away, he would say, the cause, the source of contagion, and by the act you take away the heredity, since heredity itself requires a root from whence to spring. But he lays himself open to question by his opponents when, in his zeal, he sums up the difficulties lying in the path of all true inquirers into primary causes by attributing every failure to ignorance of the hypothesis, or, as he designates it, the law of the transmission of the tuberculous bacillus. This is not just. It is but fair to assert that they who do not admit the premises of the contagionists are *not* ignorant of those premises. Opponents of the hypothesis may know the hypothesis as well as the contagionists themselves, but, knowing it, they may not accept the validity of it with such assurance of its certainty as to become convinced of its truth. They may see, in brief, so much evidence in favour of older and longer recognised views that they feel bound to hesitate, and when they hear of such facts as are disclosed in the working of the edicts of the King of Naples they naturally may hesitate the more. In the English medical fields of controversy the battle on this subject has scarcely commenced in earnest. A good number of men, led into the contagionist camp rather by the novelty of the work there than by the satisfying character of it, have created an impression, and on the question of diagnosis have created an exceedingly strong impression. But the masses of the profession are still in doubt, and before the parasitic and transmissible nature of phthisis is so far proved that the hereditary nature of the disease may be put aside, a generation of controversy of the severest kind must be carried out. And, in a matter so momentous, the labour of a generation is worth all the time and all the trouble, since, whichever side ultimately wins, the world at large will, perforce, be the greatest gainer. We have singled out the remarks of Professor SÉE in order to contrast, for the nonce, the two kinds of teaching on this important matter; but we propose shortly to review the whole discussion, which, it must be confessed, came to a rather impotent conclusion.

Annotations.

"Ne quid nimis."

THE MARCH OF CHOLERA IN THE EAST.

THE news which we announced last week as to the continuance of cholera in Mesopotamia has again raised the question whether Europe stands in danger of another invasion of that disease. Cholera in Bussorah, and even in Bagdad, does not necessarily involve such danger, and although the disease has now for many months past prevailed in both those places and in the intermediate country, its incidence has apparently been all but limited to Mesopotamia and to the western portion of the Persian Empire. The only real disquieting occurrence is the intelligence that it has made some headway along the Turkish trade routes to Europe; routes which would in the main convey the disease in a north-westerly and a northerly direction towards the ports on the southern coast of the Baltic. Should the port towns become infected, it is certain that no Russian or Turkish means of prevention such as have been adopted on former occasions would be likely to stay the diffusion of the cholera poison if the local circumstances favoured its epidemicity. But cholera in Mesopotamia, whilst it may usefully incite us to the removal of those influences which tend to propagate that disease, is by no means to be regarded as an actual cause for anxiety. We certainly are not in a position to boast of any assured immunity from cholera travelling in a westerly direction from Asia Minor; but we have the satisfaction of knowing that, after years of sanitary progress, and with a steadily improving sanitary organisation of our port and inland districts, cholera failed to get a footing in this country during the European epidemic of 1884–87, and this notwithstanding the fact that we remained all the time in frequent and unhindered communication with Paris during the whole period of the epidemic in that city. Our clear duty is, whilst maintaining all necessary watchfulness as to the march of cholera on the eastern confines of Europe, to continue that line of sanitary work which we have now maintained for so many years, and which has already saved more lives in this country than cholera ever destroyed amongst us.

DEATH OF SIR WILLIAM GULL, BART.

WITH much regret we have to announce that Sir William Gull died on Wednesday morning at 12.30, after only two days' acute illness. He never recovered from the effects of the cerebral hæmorrhage which occurred in October, 1887, although until two days ago he was not confined to his room, and was able to see his friends, and to take an interest in the numerous matters with which he was conversant. On Monday, while at breakfast, he became aphasic, and soon relapsed into unconsciousness. He never rallied, the coma gradually became more profound, and he passed away quite peacefully on Wednesday morning. Sir William Gull was seventy-three years of age on Dec. 31st. Dr. Hermann Weber, Dr. Acland, and Dr. Hood attended him during his last illness. We must reserve till next week a full account of the life and professional career of this distinguished physician.

THE NEW HEALTH ACT, MELBOURNE.

THE Bill to create a Department of Public Health and further amend the law relating thereto has been so modified that it may be useful to give a *résumé* of the more important enactments of the New Public Health Act, 1889 (Victoria). The Act appoints a Board of Public Health, consisting of a chairman and a representative member from each of the seven municipal districts, and a medical inspector, a legally qualified practitioner and an expert in sanitary science, who shall be appointed and be removable by the Governor in Council without being subject to the provisions of the Public Service Act. It is a further feature in this new Act that no officer appointed by the Governor in Council shall have his salary reduced, nor shall he be removed without previous approval of the Governor in Council. The Board has powers to deal effectually in isolating houses containing persons suffering from "dangerous, infectious, or contagious disease," and is empowered to impose a fine of £20, on conviction of the owner or occupier, for neglecting to report such cases to the proper authorities. Regulations for such matters as inspection, drainage, &c., of private hospitals are left in the hands of the Governor in Council, who may, if necessary, require such places to be registered as well as all the cases admitted into them. The Council has also powers to deal with food adulteration, offensive trades, the treatment of refuse, and the nature of the sites on which buildings should be erected.

FIRE IN LONDON.

THE report which Captain Shaw has made upon the operations of the Metropolitan Fire Brigade for the year 1889 shows that during that period the department has dealt with an unusually large amount of work, the number of calls having risen to a figure (3131) much beyond the average, and the number of fires and casualties having been augmented in like proportion. In all, 141 cases are recorded in which injury to the person was sustained or life endangered. In the majority of these the injuries were comparatively slight, but in no fewer than forty-four they were attended with fatal consequences, and in fourteen the sufferers perished in the buildings, and only their corpses could be removed. Such is the tale of deaths from fire in London for a single year, and there seems to be no reason for attributing any part of this melancholy record to deficiencies in the life-saving appliances and endeavours of the force. On the contrary, so far as the reader can gather from the report of their chief officer, the work done appears to have been well done, and the provision made to have been adequate even to the somewhat unusual demand, whether in respect of men or of material. it is nevertheless apparent from the report that a large proportion, perhaps the greater part, of the fire waste which actually occurs is due to easily preventable causes. In a very interesting series of tables which accompany the report is one showing the various causes to which the outbreak of fire is due. Among these such wholly inexcusable errors as the throwing down of lighted matches and the swinging of gas-brackets figure largely. Then, again, the upsetting of spirit lamps, though less obviously due to unpardonable carelessness, is no doubt indicative of much lack of foresight and proper attention on the part of those who are charged with the care of these very dangerous articles of furniture. The day is yet, we fear, far distant when such derelictions of duty will receive at the hands of the public the reprobation which they deserve; but in view of the immense destruction of property and the serious loss of life to which these peccadilloes are constantly giving rise, it behoves all who have it in their power to impress the obvious lesson of caution—even excessive caution—in dealing with fire and explosive substances upon their less instructed neighbours, and especially upon the young. The mischief wrought daily by heedless children and thoughtless servants in London alone can neither be calculated nor repaired.

RABIES IN LEICESTERSHIRE.

ON Jan. 8th a man and two children were badly bitten by a rabid dog at Leicester, the two latter being much torn and lacerated about the face. On the 11th all three of the patients were taken to Paris by Dr. Henry Tomkins, medical officer of health for Leicester, for treatment by the Pasteur method. Dr. Tomkins took with him also the spinal cord of the animal, with which rabbits were inoculated, which died within nine days of the inoculation. But further, another dog, bitten by the first on the same day as the above persons, developed symptoms of rabies on the 25th and died on the 27th; so that in this case there can be no doubt, as is often the case, as to the first animal suffering from veritable rabies. The man has returned home, after a fortnight's treatment, in perfect health; the two children are undergoing an additional week's treatment. A muzzling order has been put in force in Leicester since the above occurrence.

THE CONTAGIOUS DISEASES ACTS IN INDIA.

IN the *Official Gazette* of India is published a set of draft rules under the Cantonments Act of 1889. These rules, which will be taken into consideration with a view to final sanction at the expiration of two months from the present date, provide for the establishment and maintenance of free hospitals for persons suffering from any infectious or contagious disorder. By Rule 4, "if the medical officer for the time being in charge of a hospital maintained under these rules certifies in writing to the commanding officer of the cantonment that any person is suffering, or is supposed by such medical officer to be suffering, from a [contagious or infectious] disorder, and such person refuses to go to the hospital, or having gone leaves it before being pronounced free from the disorder, the cantonment magistrate may order such person to leave the cantonment within twenty-four hours." Should the order be disobeyed the offender, according to the new rules, "shall be punished with a fine which may extend to Rs. 50 (£5), or with imprisonment which may extend to eight days." Whether these rules will receive final sanction remains to be seen, but it may be safely predicted that they are not calculated to satisfy either those who supported or those who opposed the lately repealed Contagious Diseases Acts. To the latter they will be an interference with the liberty of the subject, even though that means practically the liberty to spread disease broadcast. Such regulations will also be resented as an attempt to interfere with the divine punishment for sin, ignoring the fact that venereal diseases are not necessarily

the result of sin only, but of sin with a diseased person. On the other hand, those who wish to prevent these diseases among the troops in India will in turn be dissatisfied with these rules as being inefficient. How is the medical officer to know that any person is suffering from venereal disease, and what is to justify him in supposing such a thing? There is only one way in which the medical officer may assure himself of the fact in such a manner as to prevent disease from its first appearance—viz., by the frequent periodical examination of every common prostitute known to be within the cantonment. By this means disease will be detected on its first appearance, and not until after the diseased woman has already infected a large number of men, as would probably be the case under such a regulation as is proposed. This periodical inspection, proposed by the late Mr. Skey and his colleagues in 1866, will be found to be the only efficient means of detecting and preventing venereal disease. Prostitution need not be licensed or sanctioned, but it must be regulated. Every common prostitute follows a dangerous trade, and it is perfectly reasonable to require from her such regulations as shall prevent herself from becoming more and more diseased, as well as a source of danger not only to the men who may resort to her, but to innocent wives and children. In India this is more imperative even than elsewhere, since all native prostitutes belong to a certain caste, and cannot change their calling so readily as those in this country. All that can be said in favour of these proposed regulations is that they are at least an attempt to prevent disease. But they do not go far enough. Diseased women should not be driven from one cantonment to another; they should be compelled to enter a hospital, and to stay there until they are cured.

A QUESTION IN MEDICAL JURISPRUDENCE.

A RECENT case of fatal poisoning is of interest as belonging to the obscure area of medical jurisprudence occupied by questions of criminal responsibility. A few days ago a poor woman, the mother of an illegitimate infant, and deserted by her husband and family because of her misconduct, attempted in her despair to take away both her own life and that of her obnoxious offspring. With this object she swallowed the bulk of a large dose of laudanum, purchased in pennyworths, and administered the remainder to the child. The latter died with the usual symptoms. The verdict of the jury in this case, that of "Wilful murder," appears to have been justified by the circumstances. There was clearly occasion, however, for the charitable excuse in her favour which accompanied the verdict. The plea of temporary mental derangement is one which here naturally suggests itself in extenuation of the crime. It is one, however, which must be carefully handled. If it is to aid effectually in securing just mercy for the offender, the proof of it must not rest on mere sentiment or imagination. This woman probably understood fairly well the rational consequences of her act. She was not mad in the ordinary sense. Her condition was rather that of hopeless despondency, which we might describe as the borderland between reason and unreason. The close connexion between this state and actual lunacy should not be lost sight of in determining the question of criminal responsibility. While we are unwilling therefore to sanction any sentimental abuse of the term insanity, we can conscientiously support the jury in their evident opinion that the circumstances of this distressing case are sufficient to justify exemption from the extreme penalty required by law. Another lesson implied in the history of this occurrence might be profitably studied by our legislators—namely, the expediency of amending the still excessive laxity of the Poisons Act, which allows facilities altogether needless for the purchase of dangerous drugs.

"CONGESTION OF THE LUNGS."

DR. WILKS has done well to call attention to the laxity with which the phrase "congestion of the lungs" is employed, and there is much truth in his satirical comparison between the prevalence of this mysterious affection and the social status of the sufferer. Those who employ the term mean by it to affirm that there is an acute disease of the lungs which is of great gravity, and is associated with high fever, a condition independent of any other affection—in fact, a disease *sui generis*. But, singularly enough, the pathologist rarely meets with such congestive hyperæmia, unless it be collateral or combined with inflammatory changes in the bronchi or the lungs, the congestive state with which he is most familiar being that known as passive hyperæmia, from obstructed circulation due to failure of the left side of the heart to empty itself, whether this latter depends on valvular disease or on muscular weakness. Strictly speaking, too, the conditions found after death are those of "œdema" mainly—the effects of congestion, and not congestion itself. Almost the only condition of active pulmonary congestion of which there is anything like positive proof is that which forms what is called the "first stage" of pneumonia, where everything points (clinically) to vascular engorgement. Is it not, then, time to discard the use of a term which, if it means anything, means pneumonia? The nomenclature of the Royal College of Physicians does not recognise any such affection as "congestion of the lungs" of the type alluded to, and in this it is consistent with pathological teaching.

NEW BIOLOGICAL LABORATORIES AT THE UNIVERSITY OF TORONTO.

THE new and handsome building which has been erected at the University of Toronto for the purposes of biological research was opened with considerable *éclat* on Dec. 16th and following days, there being a large number of graduates and former professors of the University present on the occasion, including Professors Welch and Osler of Johns Hopkins University, Professor Minot of Harvard University, and Professor Vaughan of Ann Arbor University. The building is in the Scottish-Norman style, and harmonises well with the University, occupying the site of the former school of medicine. It contains a capacious lecture theatre fitted up with every modern appliance for lantern and other demonstrations; and on the ground floor also are physical, chemical, and physiological laboratories. On the first floor is a large laboratory for histology and elementary biology, and several other rooms for advanced students, including special morphological laboratories and two rooms devoted to vegetable physiology and bacteriology. Our contemporary, the *Canadian Practitioner* (January 1st), gives a detailed account of the building, with ground plans and elevation.

THE TREATMENT BY SUSPENSION.

THE literature on the treatment of locomotor ataxy and other degenerative diseases of the spinal cord by suspension is already voluminous, and the views held as to the mechanism and the therapeutical value of the treatment are extremely contradictory. The most valuable of the recent contributions to the subject is one by Dr. Cagney on the Mechanism of Suspension, which he read before the Royal Medical and Chirurgical Society on the 14th of January, and which was discussed last Tuesday evening. It was hinted by Charcot, and assumed by his disciples, that the good effects observed were due to the forcible stretching of the spinal cord and nerve roots. By means of carefully devised experiments and accurate measurements both on the living body and on the cadaver, Dr. Cagney is able to show that the effect of suspension is to straighten the curves

of the spinal column, in this way producing a total shortening of the spinal canal. This is well marked in the cadaver, and is probably greater in the living subject, owing to involuntary muscular contraction. In his inaugural address at the University of Aberdeen Professor R. W. Reid stated that his measurements had led him to the same conclusion. The effect is most marked in the dorsal curve, where distinct relaxation of the cord can be seen to take place. In the cervical region there is slight stretching of the dura mater, which is probably not sufficient to influence the spinal cord. Whatever good, therefore, has resulted from the treatment cannot be regarded as due to stretching of the cord. Dr. Cagney offers the suggestion that the apparent good effects are due to the breaking-down of adhesions between the fibres, and to the removing of impediments to the circulation, both of which explanations are entirely hypothetical and not altogether probable. Since the effect on the cervical region of the cord is practically *nil*, and suspension from the head is dangerous and inconvenient, he submits that the best results might be expected from suspension from the armpits only, or from suitable gymnastic movements. The main points in the discussion related to the dangers and discomforts of the treatment. Several of the speakers mentioned cases where vomiting and syncope had been set up. This occurs even with healthy persons. One of the speakers who had been suspended by Dr. Cagney for one minute, although in perfect health at the time, experienced great pain, and fainted on being let down, and continued in a fainting condition for an hour. In the carefully recorded series of cases reported by Drs. Taylor and Russell in THE LANCET of Oct. 19th, 1889, epigastric pain, nausea, and syncope were produced by the treatment in several individuals, and they were also apparently the cause of death in a case recorded by Dr. Borsari of Modena. It was observed by Dr. Cagney that the splanchnics could be seen to stretch in the process; and he suggests, with great probability, that it is to this stretching that we must ascribe these accidents. If this be so, however, suspension from the axillæ alone will be as likely to cause them as the combined cervico-axillary method usually employed. The question of the therapeutical value of the practice was not touched on by the paper. We understand that it will be the subject of the discussion at the forthcoming meeting of the Neurological Society, and for the present we postpone any remarks on that subject.

THE SOURCES OF THE POISONING OF WATER BY LEAD.

THE severity of the recent outbreak of lead poisoning by contamination of the water-supply at Sheffield has directed the attention of the medical officers of health in many of the other towns in the neighbourhood to the sources whence the lead may be derived; and at a recent meeting of the Yorkshire Branch of the Society of Medical Officers of Health, held at Leeds, this very interesting question was fully discussed. Among the speakers, Mr. Herbert of Whitby dwelt on the many domestic processes by which lead may be dissolved from the leaden utensils commonly employed—as, for instance, for pickling pork and storing milk. Besides this, small quantities were often used for adulterating cheap teas, as also rum, beer, wine, and cider, whilst lead chromates were brought into requisition to colour confectionery. Another not previously recognised source, he said, was the tons upon tons of lead scattered over the land by sportsmen. In some places on the moors the ground was literally paved with lead, and the effects were terrible to contemplate when they considered that the water from the moors formed part of the water-supply of many towns. The general feeling of the meeting, however, was that, as regards Sheffield, the cause of the disaster was clearly attributable to the action of the water containing traces of an organic acid (carbonic acid) on the leaden service pipes, and that though such instances as Mr. Herbert adduced might account for isolated instances of plumbism, yet the various uses of lead for domestic purposes were not so fraught with danger as he described. Ultimately the Society resolved to memorialise the Local Government Board to order an inquiry into the whole subject. This step appears to be a desirable one, seeing that at the present time the presence of lead in the drinking-water of several towns in the West Riding besides Sheffield is exciting considerable anxiety, and that the question cannot obtain the exhaustive inquiry it deserves from the local authorities alone. We have already (THE LANCET, Jan. 18th) given our opinion with regard to the outbreak at Sheffield, and the best means of arresting its progress and preventing its recurrence; but an inquiry embracing all the large towns of the district would be highly advantageous, for it would be rash to assert that a common cause is in operation in all the affected places.

TESTS FOR COLOUR VISION.

THE subject of the proper means of testing the colour vision of railway officials has again been brought before the public by a lecture delivered by Mr. Brudenell Carter before the Society of Arts. Mr. Carter places great reliance on the wool test, and no doubt as a means of recognising colour-blindness it is extremely reliable; but in view of the transcendent importance of the accurate perception of signals by drivers of engines, we hold that additional security would be obtained by insisting on a practical examination in the open of coloured lights at distances varying from a few yards to a mile or more. No possible harm can accrue from such method of testing, and the fact that it is in use on some of the Belgian railways speaks strongly in its favour.

THE HUDDERSFIELD ISOLATION HOSPITAL.

FOR a considerable number of months there has been discussion in Huddersfield as to whether the needed extension of hospital accommodation for infectious diseases had best be made on the site of the existing Birkby Hospital, which was acquired by the Corporation in 1872, or on a newly purchased site of twelve and a half acres at Mill-hill, which is situated about two miles and a half from the centre of the borough. Opinion on the Council has been somewhat evenly divided at the varying stages of the discussion, and last autumn it was ultimately decided to defer the subject and await the results of the November elections. Both before that date and since then an important portion of the Corporation have been largely influenced by the opinion of Dr. MacGregor, one of the councillors, to the effect that such needed increased accommodation as is likely to be wanted for some years to come can be properly made on the site of the Birkby Hospital, and this view he has consistently maintained until a few days ago, when, in the presence of the Council, he was subjected to personal abuse by an alderman. On this Dr. MacGregor resigned his seat, and paid the customary fine, and has expressed his determination not to seek re-election. A great effort will evidently be made to induce him to alter his decision in this respect; and if he does so, there is every reason to believe that he will be returned by an overwhelming majority—if, indeed, he is opposed at all. We join in the almost universal wish that he may resume his seat, and we do this although, as we at present understand the facts, we cannot concur in the advice which he has given. His view is, however, one that has been honestly come to as the result of a full con-

sideration of the circumstances, and it is one that cannot be set aside by mere abuse. When a description of the Birkby Hospital was included in the official report of 1881, on the Use and Influence of Hospitals for Infectious Diseases, the area of the site was only about an acre and a quarter, and this although the population that year had already reached 81,841. So far as we know, there has been but little if any increase of the site since that date; but the population has in the meantime gone up to considerably over 91,000. The report which we have just referred to pointed out that the best hospitals for infectious diseases met with in England had limited the number of beds to some twenty per acre; and, although it may not in all cases be necessary or even desirable to attain this exact standard, it is certain that a much more extensive area should be aimed at than is needed in the case of general hospitals, or than can possibly be secured on the existing Birkby site. In the case of infectious hospitals it is imperative, for isolation purposes, not only to keep the pavilions well apart, but to have such grounds as will admit of the recreation of the convalescing sick without risk of transferring the different infections under isolation. For reasons such as we have referred to, it is well worthy of consideration whether any such additions can be made to that which, for the purposes to which it is put, we must regard as the already overcrowded Birkby site as will properly meet the real and growing needs of Huddersfield in the matter of isolation. If not, then money spent at Birkby will, in the end, be regarded as having been wasted. As a solution of the present difficulty, we would suggest that the Town Council should agree to call in to advise them an expert in the matter of isolation by sanitary authorities, and that they should in advance agree to abide by his decision. Such an expert should have full opportunity of hearing and considering the views of Dr. MacGregor, not in his private capacity, but as reinstated town councillor.

FRENCH MEDICINE AND THE INTERNATIONAL CONGRESS.

M. HENRI HUCHARD, director of the excellent *Revue Générale de Clinique et de Thérapeutique*, in noting the receipt of invitations to take part in the Congress to be held at Berlin in August, says that many of his *confrères* have replied in the negative to the question: "Ought we to take part in this congress?" For his own part he declares that French physicians may and ought to participate in it, and he replies to those who justify their abstention from patriotic motives by an appeal to France to take her scientific rank among other nations. He does not know what reception will be awarded them, but he is persuaded that France should make her presence and her scientific labours known in an *international* congress. M. Huchard declares that he is speaking in his individual capacity only, and does not wish to imply that his advice is that of the journal with which he is associated. We should rejoice to learn that the views expressed by M. Huchard were endorsed by the leaders of French medicine and surgery.

A CASE OF ANKYLOSTOMIASIS.

A CORRESPONDENT has sent us a letter (for which we regret not to be able to find space) in which he gives a full and instructive account of a malady of which he was the subject, and for which he consulted many eminent physicians without obtaining relief. His illness began in 1885, when in Central India, his symptoms being chiefly lassitude and anæmia attributed to overwork. In the spring of 1886 he took a voyage to Australia, and consulted a doctor in Melbourne, who prescribed iron. He returned somewhat better, but soon had to take sick leave again, when he came to London, saw three physicians, was treated by all for "malaria and spleen," and went back to his duties in the autumn of 1887 much restored in health. However, the symptoms soon returned, and he once more underwent tonic treatment with some benefit. Coming home in December, 1888, he again sought advice in London but became gradually worse, a fresh symptom, diarrhœa, setting in and rendering him very prostrate. He then went to Germany, and there an American doctor told him he was suffering from "bone-marrow disease" (this probably meaning pernicious anæmia), and advised him to enter a hospital. This he accordingly did, and came under the care of Dr. Hoffmann of the Heidelberg University Clinic, with whom rests the credit of correctly diagnosing the patient's case. Dr. Hoffmann detected, by microscopical examination of the fæces, the ova of the ankylostomum duodenale, and under appropriate treatment by male fern and thymol 127 of the parasites were evacuated. The cure was completed by a course of iron and arsenic. We sympathise with our correspondent in his sufferings, and congratulate him on the final successful issue; but although, it is true, cases of ankylostomiasis are practically unknown in England, the affection has often been described in our literature. Indeed, it is well known that beri-beri, or some forms of it, own this origin. The manner in which the diagnosis was arrived at should, however, be borne in mind by all.

THE COST OF ISOLATION AT BOOTLE.

A CASE has been tried before the Liverpool County Court in which the Bootle corporation sued a Mr. Griffiths for £4 14*s.* 3*d.*, the cost of maintenance of his servant, who was removed from his house to the public isolation hospital whilst suffering from scarlet fever. The corporation lost their case on the ground that it had not been proved that either the defendant or his wife had given the sanitary officers instructions to remove the servant. To us it seems a great pity that the corporation should have taken a step which cannot fail to hinder that isolation in their district which aims at the protection of the public health. These hospitals are provided and maintained at the public cost for a public purpose, and their influence for good should not be hindered by the exaction of money payments when they are used. If there is one person above another who is entitled to their use without a money exaction, it is a ratepayer; indeed, it has been decided in other districts, where outsiders are made to pay, that no such disability should attach to ratepayers and their households.

CEMETERIES.

THE letter from Mr. R. G. Glenn, which we publish today, draws attention to a very pressing want of accommodation which characterises many, if not indeed almost all, of our cemeteries. It is bad enough that the usages of society compel mourners to stand shivering and bareheaded at the graveside in inclement weather, and often to run serious risks of chill and other injury to health. A natural desire to show every token of respect to the departed, and the ingenuous sense of a loss so much more grievous than the stress of winter, make people slow to perceive and loth to consider these minor inconveniences, even when they rise to the rank of dangers to health and life. But there is, and can be, no reason why the dreary waiting time that must be spent in the precincts of the cemetery chapel should have its miseries aggravated by the total want of any kind of provision for the most necessary requirements of bodily comfort. We cordially commend to the consideration of those who are responsible for the administration of these establishments the suggestion which our correspondent makes. It may be that some caution would be necessary when providing anything in the nature of refreshment to

avoid the appearance even of introducing a discordant element of conviviality into proceedings which can only cease to be melancholy at the price of becoming horrible; but even if the difficulty of drawing the line should be considered so serious as to render this part of our correspondent's proposal impracticable, there can be no reason for refusing even to the most disconsolate of mourners the other amenities of which he speaks.

THE MEDICAL DEFENCE UNION.

THE annual meeting of the Union is to be held to-day (Friday), at 5 P.M., at 429, Strand, London. Seldom has any medical society of the kind, with defensive purposes, had such a good year's work to show. We shall not anticipate the details which will be read in the report. But they are most instructive. They constitute not only an ample justification of the existence of the Union, but a powerful argument to every member of the profession to become a member of it. It is surprising to see the ease and frequency with which charges are trumped up against medical men, and the way in which they dissolve and disappear under the bold challenge of the Union. The Birmingham cases alone entitle the Union to the praise and thanks of the profession. The examining and licensing bodies should take some shame to themselves when they see, as here, the record of the doings of a young body doing such effective work in the punishment of pretenders and in the defence of injured medical men. It is gratifying to find that the number of members in the year has risen from 442 to 834, and that the Guarantee Fund shows a considerable augmentation. No medical man is proof against frivolous and unprincipled threats of litigation, but his case would be a bad one if the firm defence of this Union did not discourage his enemies.

HOSPITAL APPOINTMENTS IN DUBLIN.

THE *Freeman's Journal* argues in favour of the appointment of a Roman Catholic to a vacancy in the medical staff of Mercer's Hospital, on the grounds that though the vast majority of the population is Catholic, there is not one of that creed on the staff; secondly, that the greater number of the patients are necessarily Catholics; thirdly, that the corporation gives £300 annually. It would be treason to Catholic patients to give them an inferior physician simply because he was of the same faith as themselves. Their religious interests are supposed to be secured by the chaplain. It is, moreover, a delicate, not to say an unjustifiable, proceeding, to introduce sectarian considerations into the question of medical appointments. It is obvious that none of our brethren should suffer any professional disability or disadvantage on account of their creed.

CHEMISTRY AND ITS RELATION TO MEDICINE.

AMONG the remarkable developments of medical science in recent years is the important position assigned to chemical discoveries and theories, and their relation to practical medicine. For many years the aphorism of Boerhaave, "Chymia egregia ancilla medicinæ, non alia pejor domina," defined the position chemistry ought to hold in its relationship towards scientific medicine—an aphorism which in more recent times has received point and force from the ridicule cast upon chemical theories by the teaching of Graves and Trousseau. Now, however, chemistry promises to play once more a dominant part in the medical theories and speculations of the day, and, under more competent guidance than was possible when the aphorism was originally launched against the iatro-chemists of the seventeenth century, will, it is to be hoped, avoid the errors of the past, and solve many important problems urgently requiring elucidation. As evidence of this reaction in favour of chemical speculation we need only point to the chemical investigations being carried on at the present time in physiology, pathology, pharmacology, and in clinical medicine, and to the large sums expended in almost every school on increased laboratory accommodation, to say nothing of the new laboratories constructed on the Embankment at great expense by the Conjoint Board of the Royal Colleges of Physicians and Surgeons, and which will shortly be opened for original research. With this resumption of activity in the domain of medical science, the teaching of elementary chemistry assumes an importance not hitherto accorded it. For a sound and efficient training in the principles of both physics and chemistry will be an essential equipment of the student of the future if he is to understand the facts that chemical research has to put before him throughout his professional career. These remarks have seemed necessary, since there is, we believe, a disposition to relegate the teaching of elementary chemistry to a more inferior position than it even now holds in the medical curriculum. Such a step would be disastrous, and would be utterly retrograde. For if, during the many years that chemistry was but little regarded as an auxiliary to medicine, it formed one of the essential features of our examinations, now that a more extended knowledge of the subject is required for the new departure chemistry has taken as applied to medicine, it would be absurd to reduce the elementary teaching to what a sixth-form boy could pick up during his last half-year at school.

THE REVOLVER NUISANCE AGAIN.

THERE are signs that courts of law are disposed to view with increasing disfavour the imported custom of carrying revolvers. In our issue of Nov. 30th we noticed the suggestion by a well-known judge that some legislative measure should be employed to control this useless habit. A few days ago a coroner's jury returned a verdict of manslaughter against a boy who in play pointed a revolver at a young girl, with, need we add, the usual fatal consequences. This weapon, in truth, has long since become a public nuisance. It finds its way, as in the case above cited, into the most reckless and inexperienced hands; and, curiously enough, is but seldom heard of in this country except as a cause of mischief. These facts are sufficient to justify our strongly-expressed and repeated opinion that this objectionable pocket companion is for most of those who carry it a needless and a dangerous encumbrance. To regulate and register its ownership by a reasonably heavy tax is therefore no more than a duty incumbent on the legislature.

UNMUZZLED DOGS.

A POINT of some interest in connexion with the recent dog muzzling order was raised the other day at the City Summons Court. In two separate instances a carman was charged with having upon his van a watch dog without a muzzle. The employers in both cases appeared to be under the impression that a van, being private property, did not come within the meaning of the order. Sir J. W. Ellis, the presiding judge, took a different view, though he dismissed both cases with an admonition, in consideration of the evident misunderstanding and certain unusual circumstances connected with it. He was careful to assert that cases of this kind could not be regarded as exceptions to the ordinary rule. A dog on a van in the thoroughfare was in a public place. His power for mischief was not materially altered by the fact that he was tied with a string unless he were also muzzled, and the muzzle must therefore be used. This decision is only in keeping with common sense and sanitary necessity. If an animal admittedly liable to rabies is

allowed to have his mouth at liberty in order that he may use his teeth on any chance pilferer, it matters little in the propagation of the disease whether his position is defined as "in" or "on" the street. It is not likely, too, that if mad, he would refrain from attacking a casual bystander or the carman himself. Therefore in all such cases the lesser evil is to be preferred, and the verdict was a wise one which decided that the protection of property was of secondary consequence in a question involving to the public such issues as health and life.

ASTON KEY CLUB OF READING.

HALF A CENTURY ago some pupils of Mr. Aston Key, who had settled in Reading and the neighbourhood around, founded a club, which they named after their esteemed teacher. During this long period the members have met regularly to dine at each other's houses six or eight times in the year. It has been the practice of the club to invite distinguished members of the medical profession as guests, with the object of promoting good feeling and raising the status of the profession. On Tuesday, Jan. 28th, the members deviated from their customary practice, and entertained the Mayor of Reading and the Parliamentary member for the borough, some of the well-known representative clergy and members of the legal profession, and other gentlemen from the town and neighbourhood, also some well-known members of the profession from town. It is hoped that the club may be able from time to time to repeat this method of showing professional courtesy to members of the Faculties of Theology and Law, with which that of Medicine is linked by many sympathies.

MEDICAL PRACTITIONERS' MEALS.

MODERATION and regularity probably form the concluding words of most of the elaborate directions so often expected by patients and given by their medical attendants. This is the theme which is repeated again and again, with slight variations; the quantity or the variety of alcohol may be indicated, the use of pickles and heating ingredients deprecated, and the kind of vegetable, cooked or fresh, may give a short respite to the monotony; but the theme is bound to assert itself afresh, and to come in with tremendous force at the close of the oration, so that the patient leaves, humming the refrain "moderation and regularity," as though the words had never been heard before, and possessed a talismanic power which it had been left for the wisdom of the end of the nineteenth century to disclose. But, joking apart, it may be worth inquiring how far the medical profession furnishes living examples of the truth of the doctrine. Upon general lines all are agreed, even though some may seek to widen the scope and intention of the words by adding significantly, "In fact, temperance in all things." When the question is pressed more closely, however, it will be found that the rush of work, the exacting demands of patients, and keen competition, do not allow many in general practice to follow out the second half of the lesson. It is more particularly the younger men who suffer from want of regularity, those who fear the consequences of delay when an urgent message has been received. From a health point of view it is sufficiently lamentable to find that they often have not time for their meals, but surely they are acting upon a mistaken notion of their duties to their patients. A tired brain, exhausted from want of food, is not best fitted to cope with the serious problems so often set before it. Surgeons understand the monetary value of moderation and regularity, so that their punctuality in all matters becomes proverbial; but the family medical attendant sometimes seems to consider himself privileged to be a little late, on account of his numerous engagements. Is it too much to hint that, for his own sake as well as for his patients', one engagement, his dinner hour, should be kept with greater regularity? Many practitioners are at work for longer hours than railway signalmen, for whom so much proper sympathy is felt in the event of a catastrophe. If the public could realise that it is unreasonable to expect good advice from a tired and hungry medical man, fewer exacting messages would be sent, to the advantage of all concerned.

FOREIGN UNIVERSITY INTELLIGENCE.

Dorpat.—Dr. W. Koch has resigned his surgical appointment, with the object of settling in Germany.

Halle.—Professor Otto Madelung of Rostock, who before the war was an alienist physician, but who since that time has taught surgery at Bonn and Rostock, making intestinal and rhinoplastic operations his favourite study, has been appointed to succeed the late Professor Volkmann.

Kiel.—Dr. Curtius of Erlangen has been appointed to the chair of Chemistry in place of Professor Ladenburg, who goes to Breslau.

Munich.—Professor Nussbaum is seriously ill, and his duties are being performed by Dr. Messerer.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following eminent foreign medical men are announced:—Dr. Ulrich, assistant to Professor Eiselt of Prague.—Dr. Wehendel, Director of the Veterinary School, and formerly President of the Royal Academy of Medicine, Brussels.—Dr. F. Arnold, Emeritus Professor of Anatomy in Heidelberg, at the age of eighty-eight.—Dr. Cauvet, Professor of Botany and Materia Medica in Lyons.—Dr. H. Frey, formerly Professor of Histology in Zurich.

THE importance of some representation of the medical staff on the committee of hospitals is now generally admitted. Strange to say, such a representation does not now exist at the German Hospital. But a proposal to remedy this defect is to be made next week, on Friday, at the meeting of governors. We trust that the proposal will be readily accepted, as many questions are constantly arising in which the assistance of the medical officers would be very valuable.

PROMPT MEASURES have been adopted by the Bombay Government in respect to leprosy. It has, it is stated (pending the legislation which it is understood the Supreme Government are considering), issued a notification, under a local Act, declaring the disease known as "black leprosy" to be infectious and dangerous to life; and certain specified institutions are to serve as sanatoria in leprosy cases.

WE are authoritatively informed that, despite all rumours to the contrary, the plaintiffs in the Chancery action Steele and others *v.* Savory and others have no intention of abandoning their suit, which is now passing through the necessary preliminary stages.

A REPORT has been received in Berlin that Dr. Karl Westphal has just died in a private asylum at Constance.

WE are gratified to learn that the health of Sir Edwin Chadwick continues to improve.

THE INFLUENZA.

THE records of the epidemic have become materially diminished, and on all sides physicians are busy in collating the experiences of this remarkable visitation. The Paris medical journals are full of papers, lectures, and reports of discussions at the Societies on the feature of the epidemic. At Berlin, as we have reported, steps have been taken through Professor Leyden to undertake a collective investigation by the joint action of the Clinical Society, the Medical Society, and the Society of Public Health. At Vienna Dr. Kammerer introduced the subject at the monthly session of the Society of Medical Officers of Health. He pointed out that in spite of December's heightened mortality the death-rate for 1889 was lower than that of the previous year. It was estimated that from 30 to 40 per cent. of the whole population of the city had been attacked by influenza, without reckoning the milder cases which required no medical attention. The number of deaths in December was 2273, the mean for that month of the preceding ten years being 1674. The increase was largely due to inflammatory affections of the respiratory organs. The health officers had reported fully on the outbreak, and had differed in their views as to the question of contagiousness. Amongst complications and sequelæ were reported neuralgiæ, otitis media, menorrhagia, hæmatemesis, hæmoptysis, &c. Professor Weichselbaum will describe his bacteriological researches in influenza at the next meeting of the Vienna Medical Society. Meanwhile, Dr. M. Jolles has explained that he has found in the sputa and urine of influenza cases bacilli much resembling Friedländer's pneumono-bacillus, in being encapsuled (although the capsule does not stain). The resemblance is carried still further, even to the characteristic nail-shape cultures obtained by inoculating gelatine in a test tube (*Wiener Med. Wochensch.*, No. 4), there being only some slight modification in the translucency and uniformity of the culture. Amongst the few places which have only lately been attacked by the pandemic is Gibraltar.

For the past three weeks influenza of a very marked character has been prevalent in the borough of Leicester, many cases presenting the severe prostration, intense frontal and lumbar pains, in addition to the usual catarrhal symptoms. Amongst the police, a body of robust, strong men, some 12 per cent. have been affected.

The following description of the outbreak of influenza at Boston, U.S.A., will be read with interest. It occurs in the *Boston Medical and Surgical Journal* for Jan. 2nd:—"Simultaneously with the appearance of influenza in Europe an epidemic of this disease has been raging in Boston and vicinity. Thousands of cases have been reported. The disease comes on like a severe cold, but with much greater prostration of the muscular forces, backache, and insomnia; considerable fever generally attends it from the first. In some it takes the form of a severe cold in the head, with headache and eyeache; in others bronchial symptoms predominate; in others muscular pains predominate, and the mucous membranes are almost immune; in all there is loss of appetite and more or less gastric disturbance. While resembling malarial fever in being of atmospheric origin, and in its wide diffusion, as well as in its probable contagiousness, influenza, unlike malaria, has no clearly defined native haunts, no known telluric source. Everything leads logically to the conclusion that the causal agency must be referred to an atmosphere vitiated by a living organism which multiplies and propagates itself *ad infinitum*, which affects individuals without regard to age or constitution, smites them suddenly without any period of incubation, then disappears, after a period of from four to eight weeks of prevalence, and does not generally come again until the lapse of several years. Care as to diet, care as to work, care as to the hours of sleep, &c., are important in times of epidemic, if one would be fortified against the invasion of the unseen atmospheric foe. It would seem hardly needful to inculcate the necessity of wearing warm clothing and avoiding the depressing influence of cold, and especially damp cold; but physicians who would be counsellors in hygiene cannot too much insist on these matters. Attention to the bowels, rest in bed, a bland diet, phenacetine or antipyrin for the pains, some expectorant for the cough, sulphonal or Dover's powder for the insomnia, quinine as a tonic, and the self-limitation of the process, result usually in a fair degree of comfort and convalescence with a diminished vigour in from three to six days." In another column of the *Boston Journal* it is stated to be certain that the disease began to claim victims in Boston as early as Dec. 17th, and to have developed subsequently in New York. But surprise is expressed at the long immunity of the British Islands.

THE ELECTRIC LIGHT AT THE BRITISH MUSEUM.

AT the invitation of the trustees of the British Museum a large and distinguished company assembled on Tuesday evening at a private view of the galleries, now for the first time lighted by electricity. Some 3000 invitations were issued, and the galleries were thronged with visitors anxious to witness the result of the new experiment. It may unhesitatingly be affirmed that the installation is a success. The lighting is in every respect adequate, the details have been well thought out, and the effect, taken as a whole, is eminently satisfactory. Both arc and glow lamps have been employed, the former in the spacious galleries on the ground floor, containing Greek and Roman sculpture, the Elgin marbles, and Assyrian and other antiquities, as well as in some of the galleries on the upper floor. The glow lamps have been utilised in the long suite of bronze and vase rooms on the west, and in the ethnographical gallery on the east of the upper floor, where it was deemed that the exhibits would be seen to better advantage by this kind of light. In the galleries on the ground floor there are sixty-nine arc lamps of various powers, while on the upper floor there are fifty-seven arc and 627 glow lamps. In addition to these, there are five large arc lamps in the reading-room, six in the courtyard, and upwards of 200 glow lamps in the offices and passages. The engines have been supplied and erected by Messrs. Marshall, Sons, and Co. (Limited), of Gainsborough; and the electrical work has been executed by Messrs. Siemens Brothers and Co. (Limited). Among those who were present were Lord and Lady Coleridge, Lord Edmond Fitzmaurice, Mr. E. Maunde Thompson (principal librarian), Dr. Richard Garnett, Professor Sydney Colvin (keeper of prints and drawings), Professor Murray (keeper of Greek and Roman antiquities), and Mr. A. W. Franks, F.R.S. (keeper of British and mediæval antiquities). Medicine and science were well represented, amongst those present being Sir James Paget, Sir Joseph Lister, Sir Alfred Garrod, Sir E. H. Sieveking, Sir Oscar Clayton, Dr. Hickman, Dr. Tirard, Professor Adams, Professor Flower, Professor Ray Lankester, Professor Jeffrey Bell, Professor Crookes, and Mr. W. H. Preece, under whose supervision the installation has been carried out.

A LONDON HOSPITAL FOR INSANE PAUPERS.

THE draft report of the committee appointed by the London County Council to consider the various questions in connexion with the establishment in London of a hospital for the reception of insane paupers is now in the hands of members of the County Council. It contains the evidence not only of experts in insanity and physicians engaged in the treatment of nervous diseases, but also of physicians and surgeons in more general practice. The idea of the Council is, as our readers are aware, to establish, as a complement to the existing asylum system, a hospital for the curative treatment of insanity. The defects of the present asylum system the committee state to be chiefly owing to the fact that young men fresh from the hospitals, too young to have any independent experience of disease, obtain positions as assistant medical officers, in which positions they find themselves at the head of large households, and, becoming perhaps skilful administrators, fall into the groove of asylum habits and ways of thought, without opportunities or inducements to render themselves skilled "medical" practitioners, and the purely medical treatment underlying insanity is seriously neglected for that of mere administration.

Acknowledging that the present system, as a whole, is an advance on that of half a century ago, the committee think it has not kept quite abreast with the advance of medical knowledge in other directions, and hold that one of the modifications now needed is the establishment of a hospital in which the insane would receive from an experienced resident all the special care required in respect of precautions against injury to themselves and others and in respect of moral treatment, but in which, as patients, they should be under the care of visiting physicians, prepared to deal with them as diseased persons, whose diseases were to be investigated, and if possible cured, by the aid of all the resources which skill and experience could command. This hospital, the committee state, should be situated in London, and should afford facilities for the study of the disease in its early stages. Almost all the eminent medical men who assisted the committee heartily approved of the proposal in its general form, and Sir James Crichton Browne puts one of the Council's main arguments very strongly when he says that "the medical and scientific work carried on in the largest asylum, nay, in all English asylums put together, cannot for one moment be compared as regards its character or results with what is done in the smallest London hospital; and a large proportion of the cases that are admitted into county asylums in England do not get medical treatment at all;" and that the "moral treatment" is carried out in a wholesale and imperfect way and not on true principles.

Allowing for interest on the capital, the cost of the site, and the fees to the visiting staff, the total annual cost might amount to £8000 or £10,000, while the rough estimate of the cost of the buildings is put down by Mr. Burford Rawlings at about £32,000.

The committee recommend the establishment of such a hospital, and that a subcommittee of the asylums committee be appointed to carry the proposal into effect.

THE MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

A DEPUTATION representing the Association of Members of the Royal College of Surgeons waited upon the Earl of Dunraven on Thursday morning, with the object of securing his lordship's consent to introduce a Bill into the House of Lords giving the Members the right to elect the governing body.

The deputation was introduced by Dr. Danford Thomas, and he and other members of it explained as follows both the ancient position and powers of the Surgeons' Guild, or Corporation, and its modern developments. Under the ancient charter the members of the Guild assembled in annual public meeting, and the whole body of Members were entitled to, and did actually, take part in the government of the body. In the course of years the governing power became absorbed in the Council of the College, and has been for a very considerable time exercised by this Council only. But in 1834 there was a revolt amongst the Members, and from that time to the present an organised effort has been going on, with the object of securing for the Members a re-establishment of their right of controlling the affairs of the College. The number of Members of the College was nominally between 16,000 and 17,000, but it was really about 12,000, and contributing about £20,000 a year to the funds; while the Fellows only numbered about 1000, and paid to the funds no more than about £2000 a year.

HOSPITALS AND DISPENSARIES, BURMAH. — It appears by the last official sanitary report of Burmah that the Burmese are very reluctant to avail themselves of European medical remedies offered by the Government dispensaries and hospitals. They rarely enter a hospital except as out-patients. This is mainly attributed by the chief commissioner to all the medical officers, until recently, having been Europeans lacking generally a knowledge of Burmese. The training of Burmese doctors by granting scholarships to natives of Burmah in the medical colleges of Madras and Calcutta has succeeded, and there are now employed in the Burmese hospitals both native assistants and assistant surgeons.

Correspondence.

"Audi alteram partem."

"CONGESTION OF THE LUNGS."

To the Editors of THE LANCET.

SIRS,—Dr. Wilks, in his letter published in THE LANCET of Jan. 25th, seems to be of opinion that practitioners who use the phrase "congestion of the lungs" really mean inflammation of the lungs, or ordinary lobar pneumonia. But do we not see at this very time a number of cases in which the condition is pretty accurately described as "congestion"? And I for one draw a distinction between "congestion" and "pneumonia." In the cases in question the physical signs of pneumonia are not present. The temperature in congestion, perhaps, never reaches 103°, and life may be cut short during what I suppose my friend would call the first or congestive stage of pneumonia. But all that we can prove is congestion—congestion not restricted to one lobe or to a part of a lobe. I venture to think that the statement that "hundreds of people are now dying around us of congestion of the lungs" is pretty true, except as regards the "hundreds," which is, I think, an exaggeration. If in this sentence Dr. Wilks preferred pneumonia, I think he would be wrong. We see case after case of ordinary pneumonia get well, and without any special or active treatment. But congestion of the lungs I regard as a much more serious affection, and one that must be treated promptly and decidedly with stimulants if bad cases are to be saved, for if nothing is done the patient may sink, and in a very short time, as indeed many do.

Now in these cases of "congestion" what is the state of things? The capillaries over a more or less extensive and undefined area of pulmonary tissue become gorged with blood, the capillaries and veins of all the internal organs being probably in a like condition. Excrementitious matters accumulate and cannot be eliminated from the blood. Here and there no doubt the congestion is relieved by the escape of fluid through the vascular walls, and perhaps hæmorrhages occur. But any exudation poured out is not like that which fills the air cells of the lung in ordinary lobar pneumonia. The action of the nerve centres and peripheral nerves soon becomes sluggish, the heart beats more and more feebly, and at length ceases to beat. If only a circumscribed acute lobar pneumonia had occurred, recovery, not death, would probably have been the result. But, however much we may differ in our pathological views, I sincerely hope Dr. Wilks will agree with me, not only in upholding supporting treatment and stimulants in the pulmonary attacks now unfortunately so prevalent and so serious, but in condemning the use of such drugs as aconite, antipyrin, and antifebrin, except in very small doses, which do nothing. The first is a heart paralyser, and in these cases would hasten death. It, as well as antipyrin, may lower the temperature, but the danger in these and in many other cases is not from hyperpyrexia. Whether the last drug ought to be used at all is doubtful. Some dread the giving of stimulants, and look with terror upon over-stimulation; but let those who are of this opinion compare for a moment the consequences of giving too much stimulant with the consequences of over-dosing with aconite, antipyrin, and antifebrin. Although these are recommended to the public as reliable remedies, I would not myself take antifebrin or aconite, and I should not think of prescribing either in "congestion" or in "inflammation" of the lungs.

I am, Sirs, your obedient servant,

Grosvenor-street, Jan. 27th, 1890. LIONEL S. BEALE.

To the Editors of THE LANCET.

SIRS,—Dr. Wilks' letter on congestion of the lungs is very interesting to me, as I have long felt that the term was peculiarly hazy, and probably was used in many diverse conditions. Considering that scarcely a month passes but we find some person of distinction passing away, and the cause of death certified as congestion of the lungs, it is strange that our text-books do not refer to the condition as a clinical and distinctive disease. If, as Dr. Wilks implies, congestion is only another name for inflammation, of course the matter is clear enough, and requires no discussion. But I am of opinion that the term is not used in

this sense; and I should like to hear from those who use the term what physical symptoms they associate with it. I have only certified death as due to congestion of the lungs on one occasion. Here my patient was taken suddenly ill, and could not lie down in bed; the respiration was quickened, and the respiratory murmur harsher and more audible than in health, but absolutely free from any moist râles of any description, and death occurred under a week. I certified as I did, not from the symptoms positively pointing to congestion, but to the absence of any other recognisable condition. I am, Sirs, your obedient servant,

East Greenwich, Jan. 28th, 1890. W. NICHOLSON.

To the Editors of THE LANCET.

SIRS,—I think that Dr. Wilks' question about congestion of the lungs is due to his position as a consultant and as hospital physician. In the first case he is not called in to see a case of pneumonia following influenza until it is serious, or at least well declared. As hospital physician he sees the class who will not seek relief until compelled. I have seen several cases where it was very easy to trace out limited areas of congestion—"patches," as one of your correspondents a week or two ago pointed out. I have seen such a patch in the right lung disappear under the influence of a poultice; but it was to be found next day in the other lung instead, and then, driven from that by the poultice, returned to its former position, and it was only finally dislodged by poulticing and generous living. Had this patch been neglected, I have little doubt that a regular pneumonia would have resulted. The patches were not basic, and were certainly not due to hypostasis. They occurred in two otherwise healthy men, one of them of perhaps exceptional physique. They also occurred with a falling temperature—i.e., lower than the initial temperature. I am inclined to think that severe pain is a favourable symptom. When there was absence of pain, or at least no great amount of pain, the lung symptoms occurred, and in one case, where there was a temperature of 101° and very slight frontal headache and slight vomiting, very severe cardiac symptoms followed the remission of the fever in about twenty-four hours; and great irregularity of the pulse, which was very slow and feeble, occurred. This was in the case of a very healthy boy of fifteen, and the irregularity was noted up to yesterday, the 24th, although the tone was good. One patient had been supplied with antipyrin by a chemist before she consulted me—how much I cannot say,—and the effect on her heart was such that I should be very sorry to try antipyrin in influenza. Nor did it seem to have relieved the pain. I do not think that any period can be laid down as to the duration of the fever. At first sixty hours was the rule; now twenty-four hours seems to obtain. Wash-leather tongues and ferrety eyes I have seen, but do not regard them as decisive. Perhaps the best sign is the suddenness of the attack without premonitory symptoms; but even this may be wanting.

I am, Sirs, yours faithfully,

Brighton, Jan. 25th, 1890. J. A. MENZIES, M.D. Ed. & Paris.

To the Editors of THE LANCET.

SIRS,—Dr. Wilks' letter brings forward a point of great interest. Practising amongst the poor in a northern town, I see a very large number of acute pulmonary affections, and this fact, I hope, is sufficient apology for wishing to appear in print. I must confess a longing to be allowed to use the term "congestion of the lungs," but not in the wide sense complained of in the letter. I also wish to state that in writing on "congestion" I am excluding it here as part of general bronchitis and also in its hypostatic form. In practice I frequently meet with cases, generally in adults, but in children as well, which must either be called congestion of the lung or pneumonia in its first stage. The following describes the condition I refer to, and one that I have come across on many occasions, a history of acute onset as in pneumonia, and as characteristic in appearance. Physical signs: At one base fine moist râles are present, but not the fine crepitations of pneumonia; no dulness, no tubular breathing, and no rust-coloured sputum, but rather that of bronchitis, if present at all. There is also no general bronchitis. This condition as described remains till the crisis, which is generally early. Lastly, the patients all recover. If Dr. Wilks will allow that bronchitis may exist in one lung and not in the other, the case would be so far clear, because the physical signs on auscultation are practically those of bronchitis; but I do not suppose anyone will allow that to be possible.

And now I wish to draw attention to the following position. If these cases are to be spoken of as pneumonia in its first stage, they must also be reckoned as such in making up tables for statistical purposes; and since the patients all recover without developing into lobar pneumonia, or even broncho-pneumonia, the mortality from pneumonia is reduced to a very low percentage, and the accuracy of diagnosis might well be doubted. This is no imaginary difficulty, for in my own practice I have often found such cases as described above. It seems to me, therefore, a great pity that the term "congestion" may not be used, reserving pneumonia for the more developed disease. Amongst the poor everything is "inflammation," and they rather glory in the term. In conclusion, I take one more instance. We must all know well the acute congestive bronchitis, with tinged expectoration, so often seen in plethoric and gouty subjects. It has always been a great puzzle to me why anyone could object to such cases being called "congestion of the lungs," although certainly broncho-pneumonia may and probably does exist.

I am, Sirs, yours faithfully,

Jan. 25th, 1890. A YOUNG PRACTITIONER.

THE PROPOSED RECONSTITUTION OF THE UNIVERSITY OF LONDON.

To the Editors of THE LANCET.

SIRS,—The draft scheme of the reconstitution of the University of London is now before the profession. Whilst we are waiting to hear what the colleges and medical schools on the one hand, and the graduates of the University on the other, have to say to its proposals, I should like to see in the medical papers some expression of opinion on the part of those who were most active in promoting the institution of a teaching university for London on what they take to be the general effect of the proposals in the direction of meeting the important objects they had in view. Having taken part in some of the meetings of representatives from the medical schools, when the details of the scheme for a teaching university were under consideration, and having been present and heard much of the evidence which was offered to the Royal Commission on the subject, I may claim to be allowed to express my own opinion with regard to the effect of the proposed changes.

I think that I am right in saying that the Royal Commission were of opinion that a case for a real teaching university for London had been made out; but some of its members, recognising that the University of London had done good work and were in possession of the field, recommended that that body should have the opportunity of modifying its constitution on certain specified lines, and thus of meeting the requirements of the promoters of a teaching university. Compromises are rarely satisfactory, and I fear that this suggested compromise cannot fail to be disastrous. It is true that the proposals follow in the letter the lines laid down by the Royal Commission; but they offer us only the dry bones of what is wanted. In my opinion they fail to supply the great desideratum—a university for London wherein education and teaching shall be the first object and consideration, and examinations be subordinated to it; where teachers shall have an adequate, if not preponderating, voice; and which shall be built up on the lines of such universities as Oxford, Cambridge, and Edinburgh. And not only do they fail to supply the need of London, but they take from the value of what we already possess, as they tend to destroy the great prestige which has been gained by the examinations and degrees of the University of London during the fifty-four years of its existence.

The University was formed—or, at all events, has been worked—on lines altogether different from a teaching university; and I do not believe that it is capable of being so modified as to become a teaching university and yet retain its present characteristics. The University of London, on its own lines and from its own point of view, has been a great success. From the high standard of its examinations its degrees have come to be highly valued, and thus far it may be said to have promoted education. But the University has been select rather than popular, and it could not have been numerically a success had it not been the University for the whole British empire, and in the possession of a large field from which to

draw candidates for its degrees. A teaching university is essentially a local university, and it is this that is wanted for London, where, as has been said *ad nauseam*, there are the best museums and appliances for teaching in the world. I deprecate most strongly the watering down of the examinations of the existing University. I deprecate the admission, as equivalent, of the examinations of other bodies; the transformation—if it is seriously proposed—of Bachelors of Medicine into Doctors; and the promotion of priggishness by tacking the word "honours" to certain existing degrees. These innovations will not give London what it wants. Neither will the introduction of faculties and boards of studies, although a step in the right direction, give London what it wants. The University of London must be careful to retain the standard of its examinations and its prestige, and then it will have nothing to lose and everything to gain by a real teaching university by its side. I am very jealous of its lowering either by trying to be two things at once.

I am, Sirs, yours faithfully,

Jan. 29th, 1890. GEORGE COWELL.

IODINE AS A REMEDY FOR VOMITING.

To the Editors of THE LANCET.

SIRS,—I can confirm the evidence of M. Darthier, recorded in the annotation on page 144 of your issue of Jan. 18th, as to the value of iodine in vomiting. The use of this drug as a general gastric sedative is not entirely new, though its decided efficacy is perhaps not widely known. In the *American Journal of Medical Sciences* for April, 1883, page 413, is an article by Dr. Gaunt of New York on "The Use of Iodine as a Stomachic Sedative." He alludes to its employment of old in the vomiting of pregnancy, but shows that it is equally valuable in vomiting from a variety of causes. He instances acute indigestion, phthisis, hysteria, septicæmia, nephritis, acute catarrhal gastritis, drunkards' gastritis, and numerous cases of gastro-intestinal disturbance in children. The dose he employed was three to five minims of compound tincture of iodine, given at intervals of fifteen or thirty minutes, or sometimes less frequently. To infants he gave one minim or half a minim. Shortly after reading this article, and in the same year (1883), I tried it in several cases, and it has been a good deal used at Guy's Hospital since then. I have generally given it in doses of three to five minims in two or four drachms of water every half-hour or every hour for six or eight hours, and then if it is necessary to continue it I have given it at longer intervals. But the result is often attained after the second or third dose. I have used it and known it used with success in the vomiting of Bright's disease, in cerebral vomiting, in vomiting after chloroform, in the vomiting of migraine, in vomiting from gastric disease, and in other instances. Needless to say, it does not always succeed; but it seems to me to have done good much more often than other drugs commonly used for this purpose, and to be a really valuable addition to our means of treating cases of the kind.

I am, Sirs, yours faithfully,

St. Thomas's-street, Jan. 22nd, 1890. FREDERICK TAYLOR.

THE EPIDEMIC OF INFLUENZA.

To the Editors of THE LANCET.

SIRS,—Now that influenza is rife amongst us I venture to assume that the following necessarily rough notes of a case may interest your readers.

On Jan. 7th E. T. W., aged seventeen, a tall, nervous-looking youth, came to the consulting-room complaining of headache, pains in his back and limbs—chiefly his legs,—and of general weakness. His mother, who accompanied him, gave me the following history: Her son had never suffered from any illness, except measles when very young, until Jan. 5th, when he awoke complaining of intense frontal headache, pains down his back and legs, and aching all over his body; he was hot and flushed, perspired freely, and felt sick. He remained at home until the 7th, when he returned to his duties as assistant in a warehouse, but finding himself unequal to the task he sought medical advice. His condition when he came to me was as follows:—He still complained of slight headache, aching down the back and legs, but more especially of extreme prostration, loss of appetite, and insomnia. There was no sore-throat, and no cough. The tongue was furred, he felt sick, and the bowels were constipated. I saw him the following day in bed, and he expressed himself as feeling better. The next day there was little or no improvement in his condition. He complained of no pain, but still felt very weak. He remained in this state until Jan. 16th, and on the 17th his father hastily summoned me to see the patient, who was in great pain owing to inability to void his urine. I found the lad's bladder distended, and readily relieved him by passing a No. 8 indiarubber catheter. Though able to move his legs in bed, he was unable to stand erect or assume the sitting posture when placed in the horizontal one. His appetite had returned, and nothing appeared to trouble him but the paresis or weakness of his legs. Mr. Weekes saw the patient at 5.30 P.M. and relieved his bladder. On the morning of the 18th I again drew off his urine; his legs were then completely paralysed; there was no loss of sensation, no pain, no patellar reflex, and the bowels had not acted since the 15th, and then only after a purgative. Mr. Weekes again emptied the patient's bladder at 5.30 P.M. At 9 P.M. on the same day I was called to the patient, said to be "in a fit." I found him lying on his back, insensible, skin moist, pupils dilated, breathing laborious, with loud rattling sounds in the throat, pulse irregular and slow; he had been convulsed, and there was evidence of his having bitten his tongue. The patient never rallied, and died at 4 A.M. the next day.

Whether paralysis has been hitherto observed as a sequela of so-called influenza I know not, but from absence of other causes I am compelled to believe that the above case is an instance. Epidemic influenza is prevalent in this neighbourhood, and one can hardly doubt, from its nature, that the central nervous system is primarily involved. The neuralgic pains, intense headache, insomnia, pain at the back of the neck and down the spine, loss of taste (which is not uncommon) and of smell, deafness, the extreme prostration which follows in a few days, and in this case paralysis, clearly indicate that the nervous system is seriously and early implicated. The majority of patients suffer from great weakness of the lower extremities, and it is not unusual to find them complaining of numbness of the hands and feet. Mr. Weekes tells me that his coachman, who has recently suffered from a typical attack of epidemic influenza, complained to him of the difficulty he experienced in emptying his bladder, and I have also seen another case.

The pathology of this epidemic influenza must necessarily, in the present state of our knowledge, be speculative. It may be that the virus—possibly a microbe—which finds an entrance into the blood specially selects and exerts its influence on the nervous system, and there induces morbid processes. I may add, in conclusion, that coryza has not been a prominent symptom here—in fact, hardly noticeable.

I am, Sirs, yours faithfully,

Chatham, Jan. 27th, 1890. J. J. BENNETTS, M.B.

To the Editors of THE LANCET.

SIRS,—As I observe, with some disappointment, that your issue of this date contains neither comment on nor confirmation of the pathological suggestion made by Dr. Glover Lyon in THE LANCET of Jan. 18th, I trust you will allow me to supply the omission to the best of my ability. I refer to the theory which is embodied in these words: "Epidemic influenza attacks primarily the central nervous system, producing cerebral and spinal pain."

Permit me at once to state that Dr. Lyon's view is supported by all that I have observed of the symptoms and course of the malady which is now exciting so much interest. The extraordinary depression of the vital powers which follows in its train, as shown by the condition of the temperature and the vascular system, together with the remarkable neurotic recrudescence which is provoked by neglect of these important indications during the earlier part of convalescence, would, it appears to me, of themselves point to the fact that we are in the presence of a malady which in its essence is not a catarrh, as some seem to suppose, but a cerebro-spinal inflammation. I will now enumerate some of the more particular indications which tend to support Dr. Lyon's suggestion. The signs of local inflammation, commencing in the eyes, pass backwards, possibly through the medium of the optic nerve, to the cranial nerve centres, and within a few hours portions of the spinal cord, notably the lower lumbar and sacral portions, are sensitive to deep percussion. The pains in the limbs which are felt early in

the attack are characteristic of central irritation. On the subsidence of the fever, and even before, the following symptoms, all or some of them, become manifest: insomnia, mental depression and confusion, with impaired power of mental concentration; neuroses of both arms and legs, with pains, as the patients express it, "to the very nails," "deep bone-ache," and twitchings at night; hyperæsthesia and sense of intense cold; intercostal neuralgia and mialgia of the scapular, dorsal, and lumbar muscles; feebleness of the hand grasp, with perspiration and sense of exhaustion on making the effort to increase its force; marked alteration in the handwriting, which becomes juvenile and straggling; feeblenesss of gait and tremor of the muscles of the lower extremities; præcordial distress, with a sense of faintness and even syncope; and the occasional secretion of abundant so-called hysterical urine. I venture to think that there is no great boldness in suggesting that the indications which I have enumerated tend to support the hypothesis alluded to.

Before closing this communication may I be allowed to call attention to one of the sequelæ of influenza which has not as yet received much notice—namely, a mild form of ophthalmia, which is accompanied with severe orbital neuralgia and tenderness of the globe. This secondary affection, occurring in conjunction with the recrudescent neuroses which I have enumerated, but without rise of temperature, may be taken to account for some, at least, of the so-called relapses or second attacks which have been reported, more especially by correspondents of the daily press. I am, Sirs, yours faithfully,

Gledhow-gardens, S.W., Jan. 25th, 1890. W. BEZLY THORNE.

To the Editors of THE LANCET.

SIRS,—Mr. W. B. Wallis of Colchester, retired military surgeon, after twenty years' experience in tropical countries, writes in a local paper as follows:—"The epidemic of influenza we are now passing through is a mild type of the malarial fevers so common in India, Africa, Ceylon, the Mediterranean, and the West Indies." The same opinion is held by two of my sons, the elder of whom travelled for several years in the United States of Colombia (South America) and in Demerara. He returned home twice with slight attacks of fever, and once with a very severe attack, in which his life was endangered, and convalescence lasted six months or more. The younger one has just returned from the Gold Coast of Africa, after a stay of nearly eighteen months, where he saw a good deal of fever of a very severe type, several Europeans living with him, or resident near him, falling victims to it. He had previously visited Demerara with his brother, where he also had fever severely. Neither of them has had medical training, except what little they have picked up from me; but both of them have, in their gold-mining experiences, had charge of large gangs of men; both have seen and have been prostrated by severe epidemics of fever; while I at home have listened to their experiences while superintending their convalescence, during which they have often exhibited to me what they called minor attacks of fever. It is their opinion, as expressed to me, that the present epidemic of influenza, if it had occurred in the tropical countries in which they have resided, would have been termed, and treated as, the ordinary malarial fever of those countries. I venture to put forward these opinions in order to elicit the opinions of men who have seen plenty of tropical malaria, and who can therefore speak with authority about it, and who are now in Europe witnessing this epidemic of influenza, as to the identity of these two fevers (?); because, if these ideas are confirmed by those who can speak with authority on this subject, a wide range of thought is laid open. We have at home now opportunities afforded on a large scale to study malaria: its origin, its mode of invasion, and its treatment; and at least we may learn more—much more—from mild attacks in a temperate climate than it is possible to do in the tropics. Anyhow, the comparison of an epidemic of malarious fever existing in Europe over a wide area with its tropical cousin must at least give valuable information.

In regard to the origin of malaria, two opinions are put forward: one, the time-honoured view in which we were educated as students—viz., that such fever has an endemic origin, either from impure water, from rapidly decomposing vegetable matter, from soil recently turned up, or from other local causes, especially where evaporation is rapid under hot sunshine; but as this view will not readily fit in for all places in which malaria is known to prevail, a second opinion has been promulgated, which, I think I am correct in stating, is formulated as "the influence of man on his surroundings, and of his surroundings on man" (see Sir Thomas Crawford's address to the Epidemiological Society, Nov. 13th, 1889); or, in brief, that "his environment is to man the cause of malaria." As a student I held to the first-quoted view, but my experience with my sons, and the statements I have received from them, incline me to believe in the correctness of Sir Thomas Crawford's views.

I learn from my sons' experiences that to escape fever in hot countries it is necessary to live rigidly by rule; to be very sparing in eating and drinking, especially as regards meat and spirits; to be careful about the quality of the food; to partake of fresh fruits and vegetables, with rice or meal rather than meat; to avoid exposure to sun and rain; to keep the skin clean and as cool as possible, to change clothes quickly, and be well rubbed down after perspiring freely; in other words, great temperance and cleanliness of living, with a spare rather than full habit, coupled with moderate bodily and mental exertion, are the greatest possible preventives against malaria. Of course the food taken must be varied and wholesome, and the water drunk be pure. Next, if fever threaten, there is often a warning given two or three days before an attack: obscure pains are felt in the shins or thighs or forearms, with some backache or headache; the mental faculties are less bright than usual, the bowels costive, and the urine scanty, or paler and lighter in specific gravity than usual; but, except by old hands, these slight symptoms are often unnoticed. But really these premonitory symptoms are exactly what we know so well at home, when an explosion of migraine, or bilious headache as we term it, or gout in some form or other, is imminent (defective excretion). In this premonitory state an attack of fever, my sons tell me, may be warded off, or converted into a slight attack in a healthy subject by rest, coupled with a smart purge or vomit and a good dose or two of iodide of potassium, followed by quinine. The urine then rises in specific gravity and in colour, and the symptoms rapidly disappear; but if circumstances are such that the patient either cannot or will not adopt this treatment, then he is very shortly down with a sharp attack of fever. Or, again, if the patient is one who, in his previous habits of life, has not conformed to the discipline above mentioned as necessary, or has recently arrived out "full-blooded"—in other words, whose environment is faulty, or whose abdominal organs are already impaired,—with such a one it goes hardly.

Now, such attacks as these are common enough in a minor degree among ourselves; and when my sons in their convalescence have gone down with what they called attacks of fever, I have been unable to differentiate their attacks from those which I am constantly witnessing among my own patients, but which I have not considered hitherto to be malarious in their nature. But if once the idea can be substantiated that a source of disease exists in every human being, ready to be acted upon by his environment, so that he is more or less in danger of an outbreak, according to his habits of life, then the same conditions at home and abroad, only accentuated and more active in tropical countries, exist ready to be called into action by an exciting cause. I suspect strongly that in proportion as the organs excrete freely, comparative safety follows; but if the liver, kidneys, intestines, or skin fail in removing all used-up material, or material that is taken in excess, the condition becomes one of peril. In other words, ptomaines and leucomaines are the source of danger. Here in England we exceed largely with, for a time, impunity; we eat and drink too much in quantity, without regard to quality; we smoke largely; we energise too much with our brains, too little often with our bodies; we are not particular enough as to exposure or as to cleanliness either of our skins or of the air we breathe; we do many things that in a tropical country would be fatal. Let us at least be warned that when an epidemic is present temperance and thorough cleanliness of ourselves and of our environment are the best preventives against malaria.

I am, Sirs, yours faithfully,

ALEXANDER WALLACE,
Physician, Essex and Colchester Hospital.

Colchester, Jan. 18th, 1890.

P.S.—I could adduce many points of detail in which

diseases the result of defective excretion in this climate seem to resemble the symptoms of malaria as made known to me; but I prefer, having never been in a tropical country, to ask for the opinions on this subject of those who can speak from practical experience.

To the Editors of THE LANCET.

SIRS,—In your issue of Jan. 18th I was interested in Mr. Richmond's article on the "Prevention of Influenza," and particularly where he refers to eucalyptus oil, which I also have found of much benefit in the treatment and in the prevention of the disease. I mentioned to you a fortnight ago that I was using eucalyptus oil for inhalation, but since that time I have had a very large number of cases of severe epidemic influenza, undoubtedly of Russian type, and have been able to observe how rapidly the frontal headache, the uneasiness in the nostrils, and the feeling of oppression in the chest are relieved by inhaling the steam from the oil. I direct it to be used as follows:—Put half a teaspoonful of the oil in a quart jug of boiling water, and inhale the steam for five or ten minutes at intervals of two or three hours. I recommend others in the house of the patient to have a few inhalations each time it is used, and I have noticed that the cases, after the first, are never so severe. I have myself suffered from two attacks of influenza although using the eucalyptus inhalations, but in my case there was no severe frontal headache and no running at the eyes or nose. I had all the other symptoms, followed by great prostration and considerable loss of weight.

I have found further that salicylate of soda (pure) is by far the best diaphoretic. I give twelve grains every three hours, and find that a temperature of 104° is reduced in from six to nine hours to the normal. In a few cases the salicylate has disagreed with the patient, but salol is a substitute which is always borne on an irritable stomach, and is not much inferior as a febrifuge. It must always be remembered that a warm bed and plenty of soothing drinks are necessary whichever treatment is adopted.

I am, Sirs, yours faithfully,

Hawick, January, 1890. JOHN R. HAMILTON, M.D.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Jan. 25th Dr. H. P. Hawkins has partly detailed seven out of 900 cases of influenza admitted to St. Thomas's Hospital presenting a more or less patchy erythematous rash. It would have been more satisfactory if Dr. Hawkins had also described what other symptoms were present (or absent) in these cases, as his statement, that the rash has "probably no relation to the [or "a"?] specific disease—influenza," can hardly be allowed to pass unchallenged. Kindly permit me briefly to state the leading symptoms of the following case, which was unique amongst several occurring in my practice. A lad, aged thirteen, was suddenly seized in school, about three in the afternoon, with severe headache, malaise, and vomiting. Next morning I observed on his chest, back, and limbs a most pronounced scarlatiniform rash, disappearing on pressure; and his face presented a bluish-red colour, which was specially remarked upon by his parents. He complained much of pain in the head, abdomen, and loins, and had vomited several times; temperature 103·4°. No sore-throat or bronchial catarrh whatever. Next day the rash was more patchy, and the skin was moist; temperature 101°. By the third day the patient was practically convalescent. There was no desquamation. The remarkable features of this case were: (1) the sudden invasion of the disease, which characterises *la grippe;* (2) the absence of bronchial catarrh; and (3) the transient existence of a scarlatiniform eruption. In conclusion, I may say that no medicine was prescribed.

I am, Sirs, yours faithfully,

Jan. 27th, 1890. A. G. AULD.

To the Editors of THE LANCET.

SIRS,—The following personal experience may possibly be of interest at the present moment. On Sunday last I was walking from one patient's house to another, when I suddenly felt a cold "creeping chill" down the spine, which was followed, as I walked along, with a general feeling of being cold all over. I also had a sudden sharp pain in the frontal region, but quite momentary. After seeing the rest of my patients as quickly as possible, I returned home and took some hot soup and a glass of hot and strong whisky-and-water, which quickly removed the feeling of chilliness. Finding I had a temperature of over 102°, I took 15 grains of antipyrin, followed in a few minutes by 8 grains of quinine, and went to bed "between the blankets," heaping on coverlets until I began to perspire. It was then 2.30 P.M. At 7 P.M. I took 5 grains more of quinine, and again at night. I had rather a restless night, but in the morning my temperature was normal, and I managed to do a long day's work. This morning I am comparatively well. I am still taking quinine. Did I "scotch" the enemy? Out of a list of fifty-eight patients, I find twenty-nine of them are suffering more or less from the prevalent "malarial fever."

I have had various types of the malady to contend with, the principal complications being pneumonia, intense headache, "utter prostration," and "colic." For the headache I found menthol and salicylate of soda the most useful remedies, but quinine has been my sheet anchor; and all my cases are doing well. "Champagne and oysters" and "good feeding" seem to be absolutely necessary in many cases. I am, Sirs, yours faithfully,

Upper Clapton, Jan. 14th, 1890. MEDICUS.

MEDICAL EXPERT EVIDENCE.

To the Editors of THE LANCET.

SIRS,—In your annotation under the above heading you draw attention to the case recently heard before the Recorder of Bradford, and your remarks possess for me special importance. You say that the interests of justice require that expert evidence should be equally available for those against whom sanitary authorities proceed, as well as for the authorities themselves. Apply this dogma to a supposed case exactly analogous to that under consideration. Assume that a corporation—say of Birmingham—decides to close a slaughterhouse on account of its unsuitability for such a purpose. The owner or occupier appeals, and asks the medical officer of health for Leeds to inspect the premises, and, if he can, to give evidence against the Birmingham corporation. Is the medical officer of health for Leeds bound to go, even without the consent of the corporation, whose servant he is, and inspect these premises, knowing that they have been condemned by the medical officer of health for Birmingham? If he declines, is he endeavouring to defeat the ends of justice? I must confess that such an idea seems to me preposterous, and yet your approval of the Recorder's remarks points to this conclusion.

You then go on to say that the proper remedy is that the witnesses should appear, not on behalf of one side or the other, but on behalf of the court. With this opinion I fully concur, and it may interest you to know that it was suggested to the Recorder of the Bradford corporation that he should ask the Local Government Board to nominate a medical assessor, who would be able to appreciate the evidence of the different medical witnesses at its true value. To this the Recorder would not agree unless both parties so requested, and the suggestion therefore fell to the ground. The work of a medical officer of health is often difficult enough, but it will be rendered doubly so if his efforts to protect the public health are in danger of being thwarted by the members of his own profession.

I am, Sirs, yours faithfully,

JAS. MACLINTOCK, M.D., B.Sc.,

Bradford, Jan. 28th, 1890. Medical Officer of Health, Bradford.

UTILISATION OF COUNTY HOSPITALS AND ASYLUMS FOR TEACHING PURPOSES.

To the Editors of THE LANCET.

SIRS,—Referring to Dr. Campbell's letter in your last issue on the above subject, may I point out that the Devon and Exeter Hospital offers unusual advantages for teaching purposes. The hospital possesses 218 beds (the average of those mentioned by Dr. Campbell is 130). There are four asylums (one, the Devon County Asylum, possessing 950 beds) within easy reach; two are within walking distance. Full facilities are given to students, the number of out-door pupils being unlimited, and two in-door pupils being received at very moderate fees, which include board, residence, and washing. It is near enough to the coast for

sea-bathing to be available in the morning. There is first-rate fishing in the neighbourhood, moorland walking within easy reach, and a capital lawn-tennis court in the hospital grounds. It is hardly necessary to remark that clerking, dressing, &c., done here are accepted by the Conjoint Board.

I am, Sirs, yours faithfully,

RUSSELL COOMBE, F.R.C.S., House-Surgeon.

Devon, Jan. 28th, 1890.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Local Medical Charities.

THE annual meetings of the hospitals and dispensaries have been nearly all held, and the results appear to be in nearly all instances the same. A balance more or less large on the wrong side, reduced income, equal or increased expenditure. Although Liverpool has increased so enormously in recent years, the subscription lists of the medical and other charities have gradually diminished so as to be considerably less in amount than what they were years ago, when the population was less. Probably one cause is the increasing difficulty of finding persons able and willing to subscribe the traditional guinea, lesser sums being assumed to be unworthy of offering or acceptance. This is a mistake which should be at once rectified. Everyone who can subscribe an annual sum, however small, should be encouraged to do so, postal orders forming an excellent means of saving expense in collection.

The Influenza.

Cases of influenza still occur, and the number of persons attacked has been large; but the severe form has been seen in comparatively rare cases. In most of these recovery has taken place, the few fatal ones having been accompanied with some other disease, or with advanced years.

Efforts to Reduce Intemperance and Vice.

Liverpool has the unenviable reputation of being a very drunken city, though it is doubtful whether it is in this respect worse than other seaports. One of the most fruitful causes of excessive intemperance is the practice of publicans serving with drink men and women who are already drunk, selling drink to young persons, and in other ways violating the licensing laws. Recently, arrangements have been made by which all public-houses will be subject to more strict police surveillance. Already many convictions have taken place under the new system, in spite of the proverbial difficulty of proving that the person was drunk. Efforts to reduce the "social evil" is much more difficult. Unlike the police in a few other towns, those of Liverpool have no powers of entry into brothels except by warrant, while the difficulties of dealing with solicitation in the streets are very great. Captain Nott Bowen, the head constable, has issued two reports dealing with both these evils. In the one relating to prostitution he shows that the police have done all in their power to localise, and therefore minimise, the evil. But he strongly condemns the practice of driving the occupants of brothels from houses and streets in which they have long dwelt into streets respectably tenanted, which is the inevitable result. A reduction of brothels and prostitutes in the city would mean their increase in the suburbs, as has been the case with Manchester, Glasgow, Edinburgh, and elsewhere.

Liverpool, Jan. 28th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

The Infirmary Site and St. Mary's Hospital.

AT the monthly meeting of the infirmary board held yesterday, the decision of the committee appointed to consider the application from St. Mary's Hospital for a site in the infirmary grounds upon which to erect a new lying-in hospital was submitted and discussed. The proposal was rejected unanimously, ostensibly on the ground that the Board had no legal power to devote any of the land to purposes not connected with the infirmary, but really it was considered that to further curtail the already diminished open space around the infirmary would be most undesirable, in the interests alike of the patients and of the public at large.

Influenza.

Notwithstanding the occurrence of a few cases of influenza and a large number of cases of catarrh &c., which in ordinary times would have excited no comment, it is tolerably certain that at present we have nothing worthy of the name of "epidemic." A conjoint meeting of health authorities, guardians, and medical staffs of our hospitals was held at the infirmary a fortnight ago, when it was arranged that in the event of any serious outbreak of the disease, necessitating action on the part of the above authorities, the corporation should provide the accommodation required for the more serious cases, but that medical attendance in the milder cases should be undertaken by the various medical charities. Hitherto no special action has been needed. Even the Literary and Philosophical Society has not escaped the fashionable epidemic, but at its last meeting the subject of influenza was under discussion, chiefly from its historical point of view.

Sanitation.

Last Saturday evening the annual meeting and dinner of the Manchester centre of the National Association of Sanitary Inspectors was held at the Grand Hotel. The Right Honourable J. T. Hibbert, formerly president of the Local Government Board, presided, and after allusion had been made to the improved status and ability of inspectors, he made some cogent remarks upon the condition of our rivers, especially the Irwell, pointing out that nothing less than combined effort along the whole watershed of the river could suffice to render this inky and malodorous stream satisfactory. Mr. Alderman Schofield (late chairman of the Corporation Health Committee), in replying to the toast of the Corporation, pointed out, in extenuation of the notoriously high death-rate of Manchester, that it was to a large extent fallacious to think we were so very much worse than other great urban communities. Manchester was almost entirely an urban city, with no suburban population, the suburbs adjoining not being included within the city boundaries; the consequence was that all the better and well-to-do classes lived outside the city, leaving within its boundaries chiefly the poor and ill-conditioned classes. If the city with all its suburbs could be taken as a whole, and the death-rate estimated on the whole population of what is really Manchester, the death-rate would show up very much better.

Overpressure and Backward Children.

A conference of those interested in preliminary education was held last week at Owens College, to consider if any and what means should be adopted to meet the defects in our present system of education as it affects backward and dull children. It was stated that considerable hardship is inflicted upon a small minority of children whose brain power, without being actually defective, was of a very low grade, and that the rigid rules of the code now in force prevented justice being done to such children. Some of the speakers who had practical experience in the matter stated that very little special action was required, but that more individual discretion should be given to the teachers in grading their scholars, and some additional help by increase of staff allowed to meet the exceptional needs of dull and unintelligent scholars.

Salford Fever Hospital.

The sanction of the Salford Town Council was obtained at its last meeting to the scheme for erecting a new fever hospital, though not without protest from some members at the great cost estimated for the same. The new building will consist of three pavilions, containing six wards and two isolation blocks for doubtful and other cases, with the necessary administrative offices, &c., complete. The cost of the site is £13,000, and the total expenditure will reach some £50,000, which, as the accommodation provided for this sum will be only 184 beds, makes a total cost of more than £270 per bed, comparing very badly with the magnificent hospital at Hope, which cost less than £100 per bed.

Medical Society.

At the annual meeting of the Medical Society a satisfactory report of the past year was presented. The number of members is now 284, and the library contains nearly 30,000 volumes. A serious proposal was put forward to

endeavour to find a more central home and habitation for the Society. Its present quarters in Owens College are all that can be wished for, except their inaccessibility to members from the opposite side of the city and district. It is estimated that a sum of £10,000 at least will be required to provide a building in the centre of the city, and an additional sum of £300 per annum for maintenance expenses. Dr. Ross was re-elected President for the current year.

Dr. Greenwood.

A movement is on foot amongst the Associates of the College for presenting some kind of testimonial to Dr. Greenwood on his retirement from the Principalship.

Manchester, Jan. 29th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

The Influenza.

DURING the past ten days Newcastle has experienced a distinct invasion of the epidemic influenza, indeed several city medical men are rendered *hors de combat*. It appears here in three distinct varieties. In the first the sufferer is seized with severe muscular pains, principally in the lumbar region, together with frontal headache. The second form is accompanied by gastric disturbance, causing persisting vomiting, and often a rash simulating scarlatina. The third variety follows ordinary cold or catarrh; but even this, the mildest form, is followed by unusual depression, sometimes leaving the patient quite prostrate for several days, and of course in weak subjects this prostration becomes a serious matter, and by far the worst part of the affection. At Sunderland two deaths have been certified as being primarily from influenza. At Greenhead, on the Newcastle and Carlisle line, there is such an epidemic of colds and influenza, that about eighty scholars were absent from the schools, which it was deemed advisable to close.

Carlisle.

The annual report of the medical officer of health for Carlisle shows a satisfactory improvement in the sanitary condition of "the border city." Mr. W. Brown estimates the death-rate as 17·2 per 1000—that is, after deducting 34 deaths which did not properly belong to the city. The zymotic death-rate had been 1·7 per 1000. An epidemic of measles was accountable for forty-four deaths, but it was a noteworthy fact that there had been no death from scarlet fever in Carlisle for the last two years, and six years had elapsed since there was any prevalence of the disease.

Middlesbrough.

Dr. Malcomson, the medical officer of health for Middlesbrough, has reported that the death-rate for December last was favourable for the time of year, and that the number of deaths from pneumonia (twelve) was about the average for December for several years past. The Fever Hospital Committee report that during 1889 181 cases were treated in the hospital, of which 11 died. The cases comprised 122 of scarlet fever, 32 of typhoid fever, 22 of small-pox, and 1 of measles.

The Health of Ripon City.

The medical officer of health for the city of Ripon reports that the deaths were at the rate of 16 per 1000 for the city, exclusive of the public institutions; but taking all, they were 18·7 per 1000, as against 18 7 for the previous year. Only 9 deaths had occurred from zymotic diseases. A large amount of sanitary work had been done during the year, and a new supply of water from Lumley Moor had been turned on in lieu of pumping from the river Ure. The supply was abundant, and by gravitation, and although it had been occasionally discoloured by peat and other causes, he had no doubt, when the reservoir was consolidated, there would be a great improvement in the water-supply of the city.

Newcastle-upon-Tyne, Jan. 29th.

THE PROPOSED SEWAGE BOARD, CHERTSEY.—The engineer's report upon this proposed board for the Chertsey district has been received by the subcommittee appointed to consider the sewage board scheme. The length of the proposed sewer will be thirteen miles, and the estimated cost is £185,822.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

The Queen's Hospital.

AN inquiry has lately been conducted by the authorities of this hospital owing to a charge of neglect in the case of a boy aged eleven, whose death was the result of an accident. At the inquest the jury found that "there was a certain amount of neglect on the part of the authorities of the hospital." It seems that the boy was run over in the street and sustained internal injuries which could not be estimated at the time; this was 5 o'clock on Friday afternoon. The following day peritonitis developed, and, the abdomen being opened in the evening, a rupture of the liver was discovered. The boy died on Sunday night. It was asserted that, as the nurses' ball was being held on the evening of the boy's admission, he did not get proper attention, and also that the porter, when the friends made inquiries, did not know of the patient's admission. The house committee and the honorary surgeons have made a complete investigation, and it has been shown that the boy received every attention from the staff, and that he had been carefully and well treated. The question of holding a ball in the midst of patients strikes some outsiders as incongruous and unseemly. The committee defend this, and say that it is outweighed by having the nurses at hand in cases of emergency.

The Children's Hospital.

The annual meeting of this institution was held on Jan. 27th, when the twenty-ninth report was read. The in-patients numbered 654, out-patients 12,702, casualties 957, and home patients 72. The total expenditure was £4392 4*s.* 5*d.*, as against £4243 14*s.* 1*d.* last year. The chairman, Mr. C. E. Mathews, stated his intention to increase his subscription by ten guineas a year for the next three years, with the hope that others would follow his example. A gentleman present expressed himself willing to do likewise, and it remains to be seen how many more subscribers will imitate this laudable effort to obtain increased subscriptions.

Scarlet Fever.

The decline in the number of cases admitted into the City Hospital continues. Doubtless much of this is due to the severe weather, though some credit must be given to the vigilance of the powers that be. There are now 315 against 363 a fortnight ago. The death-rate has averaged 6 per cent. of the number of cases reported.

Female Labour.

The female artisans appear to think that the time has come for organisation. Accordingly they have held a meeting and taken steps to form a combination toward carrying out their purposes. The lady who was voted to the chair spoke her mind plainly; she asserted the female workers needed a considerable amount of education in this matter. As a rule, young women of the working class went to the shop in the morning, returned home late in the evening, did a little housework or sweethearting, and for the most part seemed to think that this comprised the whole duty of life. No doubt with many it does do so, and they appear to thrive upon it. A higher end and nobler aim to the lives of female workers is an ideal worthy of following, and I should be glad to see some practical outcome of any organisation towards this desirable pursuit.

Vigilance Association.

This Association aims at the promotion of morality. At the annual meeting, held on Jan. 27th, it was shown that the donations and subscriptions amounted to £239 16*s.* There was an adverse balance of £148 10*s.* 9*d.* The chairman said that there were three practical aspects of their work—the necessity of training their children in the way of purity and holiness, both of example and teaching; the second, to rescue those who had fallen; the third, to restrain vice by means of good and wholesome laws. He eulogised these objects of the society, and pointed out instances of their salutary effect, notwithstanding many difficulties.

Birmingham, Jan. 29th

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

EDINBURGH.

Evidence for the University Commission.

A SHORT time ago it was mentioned in the columns of THE LANCET that a committee appointed by the Students' Representative Council of the University of Edinburgh to consider the evidence that should be laid before the University Commission regarding the medical faculty had prepared its draft report. Since this draft report was published it has undergone considerable revision and modification, and in its present form draws attention to the following points, which it thinks should be brought under the notice of the University Commissioners—viz., in the Faculty of Medicine it would like to recommend the adoption of a five years' course, but considers that under existing regulations this would be inadvisable; as regards examinations, it is suggested that the second professional examination should be divided into two parts, and that the final examination should be held twice a year, instead of once as at present. It also suggests some alterations in the methods of carrying on these examinations. In connexion with the overcrowding of classes, it is stated that the teaching staff of the University bears a very small numerical proportion to the educational work to be done—one professor to about 300 students. Remedies are suggested for the improvement of matters in this respect. It is also thought that class lectures should be regulated, and that more attention should be given to practical work. The report states that at present there is too much overlapping of class work, and that by suitable re-arrangements of subjects, with free excisions of these over-lapping parts, much time might be gained for the study of subjects not at present taken up in the curriculum. Under the heading "Research," the report states that it would be advisable that there should be a reduction of the laboratory fees, and that more individual attention should be given to those who avail themselves of the opportunities presented of working in the various laboratories.

Edinburgh Royal Society.

At a special meeting of the Royal Society, held on Tuesday afternoon, Professor Calderwood read a paper on "Evolution and Man's Place in Nature." In his argument he seems to indicate that the laws of evolution governing the physical and psychical portions of man are not framed in the same fashion. He argues that "descent with modifications" must be accepted as far as the animal portion of man is concerned, but that the higher human activities—thinking, reasoning, and voluntary control of emotions—are not to be considered synonymous with mere brain and nervous action. He cannot think of mind as associated in any way with mere protoplasm, and he therefore contends that, the two being separate, the laws governing them are distinct; that this holding good in the case of the amœba, it also obtains in the case of more highly developed protoplasm. As might be expected, such a contention was not accepted without much searching questioning by the disciples of Geoffroy St. Hilaire, Darwin, and Haeckel. The discussion was full of interest, and I hope that both papers and criticisms may be fully published by the Society.

Edinburgh Eye, Ear, and Throat Infirmary.

The annual general meeting was held this week at this institution in Cambridge-street. The chairman, Mr. John Cowan, in moving the adoption of the report, directed attention to the value of the work which the institution had accomplished, and to the economical manner in which that work was carried on. During the last forty years 36,070 patients had applied for advice, and of these 489 had been treated as in-patients. Last year there were 1336 applicants for treatment, only one of whom, however, was treated in the house. In addition to these, 8846 had been treated for diseases of the ear since July, 1875; 1058 were seen during the past twelve months, fifteen of them undergoing operations. The number of cases treated in the throat department since 1883 was 1132, 219 of these having been seen during the past year. Of these, thirty-two underwent operations. In the eye department there had also been thirty-eight operations. There was a balance due to the treasurer of £11 18*s.* 3*d.*, but to set against this there had been two legacies of £50 each during the year.

General Council of the University of Edinburgh.

The special meeting of the General Council of the University of Edinburgh, called for the purpose of considering the report by the Business Committee mentioned last week, turned out to be a failure. According to a declaration by the Scottish Universities Commission, there requires to be a quorum of seventy at a special meeting. As only forty-four members were present ten minutes after the time advertised, Sir William Muir, principal of the University, announced that as there was not a quorum the meeting would be dissolved. So much for the first general meeting convened under the new Act.

Edinburgh University Court.

At a meeting of the University Court held on Tuesday the Lord Justice Clerk, Lord Kingsburgh, was appointed to be one of the Curators of Patronage of the University for three years, from the 26th February next, in succession to Lord Balfour of Burleigh, whose second period of office then expires. Professor W. A. Herdman, D.Sc., University College, Liverpool, was appointed to be the additional examiner in Natural History, and Dr. J. Crawford Renton, Glasgow, to be the additional examiner in Clinical Surgery. The other additional examiners in Medicine were re-appointed for the current year.

Edinburgh Health Returns.

This week the health returns for Edinburgh show a very satisfactory improvement. The number of deaths has diminished from 160 to 120, so that the death-rate is diminished from 32 to 23 per 1000 of the estimated population. Influenza has again claimed five victims, zymotic diseases twenty-four. Although this is a comparatively low death-rate, it is still far above the average, and compared with Leith, which has a mortality of only 14 per 1000, it is extremely high. The number of births during the week was 140.

The Triple Qualification

At the quarterly examinations for the Triple Qualification, held in Edinburgh in January, the following were the results: For the first examination 45 candidates presented themselves; of these 26, or nearly 58 per cent., were successful. For the second examination there appeared 64 candidates, of whom 31, or over 48 per cent., satisfied the examiners. At the final examination 89 candidates appeared, and 45, or over 50 per cent., passed, and were admitted L.R.C.P.Ed., L.R.C.S.Ed., L.F.P. and S.G.

Dr. W. W. Ireland, Superintendent of the Home and School for Imbeciles, Edinburgh, has consented to come forward as a candidate for the representation of the Landward portion of the parish of Prestonpans on the County Council.

Edinburgh, Jan. 27th.

GLASGOW.

University Students and Anti-vivisection.

A most interesting debate was recently held in the University Union Hall on the subject of vivisection, when the anti-vivisection party were utterly routed. The debate was a joint one, the various students' societies (the Medico-Chirurgical, Theological, and Dialectic) taking part in it, under the direction of Professor George Buchanan. All the usual arguments for and against the experimental method were stated fully and ably, and at the end of the discussion a vote was taken, when it was found that 135 voted for vivisection, while the anti-vivisectionists numbered thirteen only.

Lock Hospital.

The annual report of the Lock Hospital shows that in 1889 the number of patients admitted was 344, an increase of 49 over the previous year. The majority of the patients were young girls, some of them of tender years. There were admitted for the first time 222; for the second time, 87; third, 32; fourth, 17; fifth, 2; sixth, 2; seventh, 2; and for the thirteenth time, 1.

Royal Infirmary.

The annual report of this institution, just published, contains much interesting information. It notices first of all the fact that the efforts of the managers to float St. Mungo's College, with which the infirmary medical school has been incorporated, have been successful, and it refers to the necessity which existed for providing the Professor of Clinical Medicine with wards, and appointing him an extra physician. The managers express themselves as satisfied with the changes

thus inaugurated; they also ask the consent of the Court of Contributors to the transference of the Medical School buildings to the College, reserving only the use of such parts as are required for dispensary purposes. The resignations of Dr. Middleton, assistant physician, and Dr. D. Newman, pathologist, are recorded; and the appointment of Dr. James Dunlop to the former office, and of Dr. J. Lindsay Steven to the latter, is noted. Extreme regret is also expressed on account of the death of Professor James Morton, who was for so many years one of the surgeons and a manager of the infirmary. The superintendent's report states the admissions to have been 5408; treated to a conclusion, 5377; died, 533, or 9·9 per cent. Each of these items shows an increase as compared with those of 1888. The expenditure on each fully-occupied bed was £49 6*s.* 7½*d.*, against £47 11*s.* 5¾*d.* in 1888; and the average cost of each patient treated to a conclusion was £4 18*s.* 4*d.*, as against £4 17*s.* 5*d.* In addition to the daily average number of patients (538), there is a resident staff of 192, making an average daily population of 730. The financial position of the infirmary continues to be very satisfactory, for although what is named the ordinary income falls short of ordinary expenditure by nearly £7500, the extraordinary income amounts to over £26,000, so that the directors will be able to pay their way for the year and add nearly £20,000 to capital account. At the public meeting at which this report was submitted, Deacon-Convener Mason observed that while the sum of £5500, obtained during the past year from the working classes by workshop subscriptions, was creditable, he did not think it adequately represented the working classes of the city.

Jan. 27th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

DUBLIN.

Royal University of Ireland.

A MEETING of Convocation was held last week, presided over by Lord Emly, Vice-Chancellor of the University. The report of the annual committee suggested that, in view of possible legislation regarding university education in Ireland, the Senate be requested to provide an opportunity for the expression by Convocation of its views on any Bill that may be introduced by the Legislature. Regret was expressed that the members of the University could not visit the museum illustrative of physical science, biology, and pathology. To exclude students from the advantages of access to collections containing valuable, and in some cases unique, specimens appears to be a policy of doubtful expediency. Under the statutes in force up to the present year, Fellowships becoming vacant by death or resignation in and after 1889 could only be filled up by competitive examination among the graduates of the University. It will undoubtedly surprise many to learn that these statutes have been altered and new ones substituted, from which the provisions for competition have disappeared. This is a matter which gravely affects the stability and wellbeing of the University and the interests of the graduates, if the rich prizes offered for competition, under the provisions of the Charter and the sanction of the Royal statutes, should have been withdrawn, and withdrawn in the very year when for the first time they were to have been attainable. All will agree, further, that it was undesirable that changes so vital to the interest of graduates should be made in the statutes of the University without consulting or even notifying Convocation. Dr. O'Sullivan of Cork was unanimously elected Senator of the University.

Suicide in Sir P. Dun's Hospital.

A Scandinavian sea captain, named Beck, who had been under treatment in this institution for hypochondriasis, cut his throat with a razor last week, and died six hours afterwards. The coroner's jury exonerated the hospital authorities from all blame.

Health of Dublin: its Sewerage.

For the week ending Jan. 18th, the death-rate was equal to 48·0 per 1000, being 107 deaths above the average for the corresponding week of the last ten years. To influenza thirteen deaths were ascribed, but the disease appears to be diminishing. Predictions have been made that Asiatic cholera may follow in the track of influenza, and it is an undoubted fact that the epidemic of influenza in the summer of 1831 was succeeded in the following spring by an outbreak of cholera. Attention therefore has been directed of late to the sewerage of Dublin, which is condemned by all sections of the citizens, and it is alleged by a large number that the bad sanitary condition and consequent high death-rate of the city are almost entirely due to the condition and formation of the main sewers. Mr. C. Dennehy, the senior member of the corporation, has paid considerable attention to this matter, and states that of the twenty-six miles of 12-in. pipes laid down as main sewers, nearly all are full of deposits, and utterly useless as sewers. He asserts that these main sewers are badly constructed, with wrong levels and outfalls, and, in fact, the worst and most dangerous system of main sewers in any large city in Europe. Further, that 12-in. pipes are not used in any other city but Dublin. He urges the citizens to insist upon the Government at once appointing a properly qualified official to hold an investigation into all matters and things connected with the condition of the main sewers as regards their present condition, and to report what alterations or improvements are absolutely required.

His Excellency the Lord-Lieutenant has appointed Dr. William Moore to be high sheriff of the county Antrim for the ensuing year.

Dublin, Jan. 28th.

BELFAST.

The Sanitary State of Belfast.

While Belfast is increasing in size, population, and wealth with extraordinary rapidity, so that it bids fair soon to be the capital of Ireland, its sanitary condition is by no means in a satisfactory state. We have been recently passing through a widespread epidemic of enteric fever, and probably owing to this fact the public press has been directing attention to the many sanitary defects present in the city. Mr. John Lanyon, C.E., has written several vigorous letters in reference to this matter, and has pointed out the existence of the following, among other objectionable arrangements: (1) Open sewer ventilating grates; (2) unscientifically constructed ventilating pipes; (3) cesspools in the suburbs; (4) filthy and insanitary back passages or lanes; (5) badly constructed yards; (6) keeping of pigs in places quite unsuited for the purpose; (7) houses with no yards or "conveniences." It is to be hoped that now these defects have been pointed out they will be corrected and not allowed to occur again.

The Samaritan Hospital.

From the report read at the annual meeting on Jan. 22nd, I learn that during the past year 857 patients were treated in the extern department, involving 5080 visits. In the wards ninety-six were treated. There were only three deaths during the year. The greater number of the intern patients were surgical. There were five ovariotomies, all of which were successful. In four cases tumours of the womb, producing hæmorrhage dangerous to life, were successfully removed. Two of the patients were pulseless when they arrived at the hospital. In three cases surgical relief was afforded, with complete restoration to health, where injury had occurred during confinement, rendering the lives of the sufferers miserable. The well-known frequency with which heart affections are associated with some of the peculiar ailments of women was exemplified in twenty of the cases treated in the wards. Fifty of the cases treated in the wards were from various country districts. The remainder were city cases. During the year the senior students of Dr. Dill's class have been shown some of the results of the operative work. With some extension of the free department the hospital might be made a valuable addition to the clinical teaching resources of our local medical school.

Hospital for Consumption and Diseases of the Chest.

From the report read at the annual meeting of this hospital on Jan. 23rd, I learn that the charity has removed to larger premises in Fisherwick-place. During the year there were 877 new cases, being an excess on that of the previous twelve months, the great majority of these being phthisis patients. The committees are anxious to provide for the retention in the hospital of three or four patients at a time, not for incurables, but for those in whom the physicians hope to arrest the progress of the disease, and one bed has already been presented to the hospital. There is a balance in hand of £45.

The Hospital for Sick Children.

The annual meeting was held on Jan. 24th, when the report read stated that during the year there had been 386 intern and 9397 extern patients. As compared with the

previous year there was a balance in the treasurer's hands of over £55. It is expected the new convalescent home at Newtownbreda will be ready for patients in the spring. The building will be capable of containing twelve beds, but only six will be used at first. The total amount subscribed (including interest) for this scheme is £4079 18*s.* 9*d.* During the present session thirty students (a large increase on last year) are attending the hospital clinics. In this way the hospital, as was originally intended, continues to be an efficient adjunct to the medical school in Belfast, and fulfils one of the recent requirements of the Royal University, that every student entering for the examination for medical degrees shall present a certificate of attendance on at least six cases of diseases of children (medical or surgical).

The University Extension Scheme.

The inaugural lecture in connexion with the University Extension Scheme was delivered in the Ulster Hall, before a crowded audience, by Professor Tyndall, on Jan. 21st. Taking as his subject "Our Invisible Friends and Foes," Professor Tyndall gave an interesting account of the torula of alcoholic fermentation and of the micro-organisms of splenic fever, rabies, tuberculosis, &c. On the motion of Professor Redfern, M.D., seconded by the Rev. R. J. Lynd, a hearty vote of thanks was passed to the lecturer.

Belfast, Jan. 28th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Fundus in Hypnotism and Catalepsy.

THOSE who are interested in hypnological researches know that the eyes of hypnotised subjects undergo certain changes. In a paper lately read at a meeting of the Academy of Sciences, MM. Luys and Bacchi stated that the eyes of cataleptics were fixed and exceedingly brilliant. In somnambulists the eyes were mobile, preserving at the same time a particular brightness and a functional activity which permitted somnambulists to see many things in detail which escaped their ordinary notice. These authors have made some very interesting ophthalmological researches on nine persons (six women and three men) in the three stages of catalepsy, somnambulism, and hypnotism. The eyes of each were examined, and the following conditions were found:—1. In the normal state the colour of the fundus of the eye was noted with precision, and the existence of three concentric zones of the retina was also established. 2. In the cataleptic state, where the pale colour of the retina changes suddenly, the papillæ assumed a rosy tint, the three concentric zones lost their clearness of outline, whilst the veins and the arteries were swollen. The iris was a good deal dilated, and became nearly insensible to light. This congestion of the retina took place with the same characteristics in hypnotism. In the stage of lucid somnambulism the vessels were equally swollen, but the colour of the papilla was less vivid, the iris more mobile, became more sensitive to the light, and dilated more easily.

Gastric Fistula.

Dr. Terrillon, on March 9th, 1888, presented at the Academy of Medicine a man on whom he had performed gastrostomy for a narrowing of the œsophagus. Since that time Dr. Terrillon has made several unsuccessful attempts to introduce sounds of the smallest calibre into the œsophagus. The patient therefore fed himself through the fistula in the stomach, although the gastric juice was so acid that it caused intense pain in the fistula. On the 12th of June Dr. Terrillon succeeded in passing a small sound with an oval extremity into the stomach, and alimentation became easy and abundant, and the patient fed himself almost entirely by the mouth. The gastric sound was removed notwithstanding the difficulties that surrounded the case, and Dr. Terrillon closed the opening. The patient left the hospital with a small fistulous opening which was covered over with a pad and bandage, but soon returned to have the fistula closed, and Dr. Terrillon performed the operation which resulted in a small fistula still being left. The patient now takes his food in the ordinary fashion, but he is obliged to wear a compress, and to have the sound passed from time to time.

Tuberculosis.

The debate on the instructions of the Commission on the Prophylaxis of Tuberculosis has concluded for the present, without any striking practical result. The Academy decided to send back the instructions to the Commission for their revision.

Dermatology and Syphilography.

The first meeting of the Congress of Dermatology and Syphilography for the year 1890 will take place on April 10th, and will be continued on the following two days from 9 to 11 A.M., at the Hôpital Saint Louis. A list of the questions to be discussed should be forwarded before March 1st to Dr. Emile Vidal, General Secretary, 65, Rue d'Anjou, Paris.

Paris, Jan. 28th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

A Case of Lethargy.

AN interesting case of lethargy was observed lately in Professor Mendel's private hospital here for diseases of the nerves. The patient was a tramway driver of nineteen, a strong and healthy lad, who had never been seriously ill in his life. While he was driving a car last November a weariness suddenly came over him without any warning symptoms, and he felt as if in a dream. He drove on mechanically, and, as the horses stopped and went off of their own accord on hearing the conductor's bell, his condition was not at once noticed. On the second day, however, he seriously damaged two carriages and imperilled a third, and did not notice them till the collision had occurred. He was now suspended from service and medically examined; but the doctor found nothing the matter with him. This condition lasted five days, during which he ate only when told to do so, took all that was given him, and was so helpless that, as he himself expressed it, anybody might have done what he liked with him. This lethargy ceased as suddenly as it had begun. Having been dismissed from the service of the tramway company, he had to look out for other employment, and was working in excellent health and spirits at a building on Dec. 2nd when the same lethargy came over him again. This time, too, he worked on mechanically, only with the difference that he did not speak. The somnolent condition lasted six days, and then ceased as suddenly as before. He then consulted Professor Mendel, who ascertained that the case was one of lethargy such as he had described in 1877 in the case of a joiner, and such as the French scientist Gelineau had described in several cases in 1880. It is a nervous affection, the causes of which are still unknown. Experience, however, has sufficiently proved that it is not dangerous.

Death-rate of German Cities.

The following official statistics of the death-rate in eight widely distant German cities during the epidemic may fairly claim to be regarded as a history of it in a nutshell:—

	Berlin.	Munich.	Cologne.	Königsberg.	Dantzic.	Kiel.	Stuttgart.	Frankfort-on-the-Maine.
Average death-rate of the last ten years..	26·4	31·6	26·5	31·1	28·4	22·5	21·4	19·1
In November, 1889	18·7	23·8	18·9	23·9	20·4	25·9	16·8	15·1
In the first week of December, 1889....	20·6	22·5	24·7	25·3	27·5	21·7	21·3	22·1
In the second week....	27·2	28·8	23·7	29·2	27·0	33·5	17·9	16·8
In the third week	32·4	26·5	24·5	27·2	47·5	42·5	15·7	19·6
In the fourth week	37·7	28·8	29·5	27·2	61·0	60·6	16·1	27·4
In the New Year's week	32·1	43·0	51·0	41·1	52·2	36·1	28·4	41·4
In the second week of January, 1890 ..	26·2	48·6	52·2	39·2	37·1	39·6	49·0	39·0

The sudden rise in the death-rate shown by these statistics was due chiefly to acute diseases of the breathing organs consequent on influenza. Of the German cities, Hamburg and Breslau have suffered least. The maximum of of deaths

in St. Petersburg was in the last week of November; in Stockholm and Warsaw in the third week of December; in Vienna, Berlin, Kiel, and Dantzic in the fourth week of December; in Paris, Frankfort-on-the-Maine, and Hanover in the New Year's week; in London, Brussels, Munich, Cologne, and Stuttgart, so far as yet ascertainable, in the week which ended on Jan. 11th.

Death of Professor Heinrich Frey.

The eminent histologist, Heinrich Frey, professor of anatomy in the University of Zurich, died there the other day of apoplexy complicated by influenza. He was born in 1822 at Frankfort-on-the-Maine, studied at Bonn, Berlin, and Göttingen, graduated in 1845, was appointed Professor of Anatomy at Zurich in 1848, and Professor of Zoology in the Polytechnic Academy and head of the Institute for Microscopic Anatomy there in 1855. The most famous of his numerous writings are his "Elements of Histology," which has been translated into English, French, Italian, and Spanish; his "Handbook of the Histology and Histochemistry of Man," which has been translated into English, French, and Russian; and his book entitled "The Microscope and Microscopic Technics." His principal contribution to zoology is his "Comparative Anatomy of the Invertebrate Animals." He has also written much on butterflies.

The Influenza.

The collective investigation of the present influenza pandemic, instituted at the instance of Professor Lazarus by the Berlin Society for Internal Medicine, has begun its work. The committee consists of twenty-nine members of this Society, including Profs. Leyden, Fraentzel, Guttmann, Ewald, and Lazarus, four well-known members of the Berlin Medical Society (Profs. Hirsch, Senator, Fürbringer, and Zuelzer), and two members of the German Society for Public Hygiene. This committee met, with Prof. Leyden in the chair, on Jan. 21st, and resolved to send to all physicians a schedule containing questions bearing on the onset, course, and duration of the disease; the proportion and sex of the population attacked; the symptoms and complications observable in the different organs of the body; the occurrence of pneumonia as a sequela, and the frequency of relapses. Questions were placed on the schedule touching the contagiousness of the malady, its influences on existing diseases, and the best mode of treating it. The committee further resolved to co-operate with the International Committee of Collective Inquiry in London, as well as with the Prussian Ministry of Religion, Education, and Medicine, the Prussian and Imperial Home Offices, the Ministry of Justice, the Imperial Health Office, and other central authorities, which have ordered inquiries on their own account. It is hoped that the German physicians will not refuse their support to this public-spirited enterprise.

Catarrhal and purulent affections of the tympanic cavity are reported among the most frequent consequences of the epidemic, and the aurists in Berlin, Halle, and Göttingen, and probably everywhere else, have their hands unusually full.

Whooping-cough.

In a little-known German paper, a contributor, professing to be a physician, describes a simple means of suppressing the most violent fits of whooping-cough by grasping the lower jaw as if for the operation for dislocation of that bone, and pulling it gently but strongly downwards and forwards. The effect of this on the paroxysm he claims to be absolutely certain, and that the operation can be performed without disturbing even a sleeping patient.

Professor Alois Martin.

Dr. Alois Martin of Munich has resigned his professorship of Medical Jurisprudence there. He founded the *Münchener Medizinische Wochenschrift* (Munich Medical Weekly) in 1854, and remained its editor till 1869.

A Medical Diplomatist.

Dr. Frederigo Susviela Guarch, Minister Resident of the Republic of Uruguay at the Court of Berlin, has founded a periodical entitled "Revista General de Ciencias Medicas," with a view to making the best results of German medical research and practice available to his fellow physicians whose mother tongue is Spanish.

Berlin Jan. 28th.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5580 births and 4514 deaths were registered during the week ending Jan. 25th. The annual rate of mortality in these towns, which had been 25·2, 28·1, and 27·0 per 1000 in the preceding three weeks, further declined last week to 24·2. During the first four weeks of the current quarter the death-rate in the twenty-eight towns averaged 26·3 per 1000 (it was 29·7 in London and only 23·7 in the twenty-seven provincial towns), and was 2·5 above the mean rate in the corresponding periods of the ten years 1880–89. The lowest rates in these towns last week were 15·0 in Derby, 15·9 in Norwich, 16·8 in Nottingham, and 17·7 in Huddersfield. The rates in the other towns ranged upwards to 27·1 in Leeds and in Hull, 27·2 in Bristol, and 27·8 in Preston. The deaths referred to the principal zymotic diseases, which had been 423, 396, and 381 in the preceding three weeks, further declined last week to 354; they included 145 from whooping-cough, 50 from measles, 46 from scarlet fever, 45 from diphtheria, 37 from diarrhœa, 31 from "fever" (principally enteric), and not one from small-pox. No death from any of these zymotic diseases was recorded during the week in Sunderland; while they caused the highest death-rates in Bristol and Bolton. The greatest mortality from whooping-cough occurred in London, Hull, Bristol, and Bolton; from measles in Liverpool and Wolverhampton; and from scarlet fever in Manchester. The death-rate from "fever" showed no marked excess in any of the twenty-eight towns. The 45 deaths from diphtheria in these twenty-eight towns included 22 in London, 4 in Manchester, 4 in Salford, 3 in Sheffield, 2 in Birmingham, and 2 in Newcastle-upon-Tyne. No death from small-pox was registered in any of the twenty-eight great towns. Only one case of this disease was under treatment on Saturday last in the Metropolitan Asylum Hospitals, and 1 in the Highgate Small-pox Hospital. The number of scarlet fever patients in the Metropolitan Asylum and London Fever Hospitals further fell last week to 1372, from numbers declining in the preceding three weeks from 1609 to 1394; 91 cases were admitted to these hospitals during the week, against 71 and 79 in the preceding two weeks. The deaths referred to diseases of the respiratory organs, which had been 1069 and 1010 in the previous two weeks, further declined last week to 736, but exceeded the corrected average by 167. The causes of 78, or 1·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Nottingham, Bolton, Norwich, Wolverhampton, Derby, and Halifax. The largest proportions of uncertified deaths were registered in Huddersfield, Liverpool, and Salford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 29·0 and 27·2 per 1000 in the preceding two weeks, further declined to 26·4 in the week ending Jan. 25th; this rate exceeded by 2·2 that which prevailed during the same week in the twenty-eight English towns. The rates in the eight Scotch towns ranged from 16·4 and 19·7 in Paisley and Greenock to 30·5 in Leith, 33·2 in Aberdeen, and 33·5 in Dundee. The 683 deaths in the eight towns showed a further decline of 22 from the numbers in recent weeks, and included 36 which were referred to measles, 21 to whooping-cough, 12 to diarrhœa, 7 to scarlet fever, 6 to "fever," and not one to small-pox; in all, 90 deaths resulted from these principal zymotic diseases, against 93 and 86 in the preceding two weeks. These 90 deaths were equal to an annual rate of 3·5 per 1000, which exceeded by 1·6 the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of measles, which had been 39 and 34 in the previous two weeks, rose again last week to 36, of which 19 occurred in Glasgow, 13 in Edinburgh, and 2 in Leith. The 21 deaths from whooping-cough, on the other hand, showed a decline of 9 from the number in the previous week, and included 7 in Glasgow, 5 in Edinburgh, and 4 in Dundee. The 12 deaths attributed to diarrhœa, of which 5 occurred in Glasgow and 3 in Dundee, also exceeded the number in the previous week. The 8 fatal cases of diphtheria included 4 in Edinburgh and 2 in

Glasgow; 5 of the 7 deaths from scarlet fever were returned in Leith; and 5 of the 6 deaths from "fever" in Glasgow. The highest death-rates from the principal zymotic diseases last week were 4·6 in Edinburgh and 7·9 in Leith. The deaths referred to diseases of the respiratory organs in the eight towns, which had been 231 in each of the previous two weeks, declined last week to 181, but exceeded the number returned in the corresponding week of last year by 41. The causes of 62, or 9 per cent., of the deaths registered in the eight towns were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 34·9, 44·2, and 48·0 per 1000 in the preceding three weeks, further rose to 48·8 in the week ending Jan. 25th. During the first four weeks of the current quarter the death-rate in the city averaged 44·0 per 1000, the mean rate during the same period being 29·7 in London and 29·6 in Edinburgh. The 330 deaths in Dublin last week showed a further increase of 5 upon the numbers in recent weeks; they included 10 which were referred to whooping-cough, 8 to "fever" (typhus, enteric, or ill-defined), 5 to measles, 1 to scarlet fever, and not one either to small-pox, diphtheria, or diarrhœa. Thus the deaths from these principal zymotic diseases, which had been 20 and 17 in the previous two weeks, rose last week to 24; they were equal to an annual rate of 3·5 per 1000, the rate from the same diseases being 1·9 in London and 4·6 in Edinburgh, where measles is still epidemic. The fatal cases of whooping-cough, which had been 6 and 5 in the previous two weeks, rose last week to 10; and the deaths from "fever" and from measles also exceeded the numbers in the previous week. The deaths referred to influenza, which had been 13 in the previous week, declined last week to 8. Eleven inquest cases and 3 deaths from violence were registered; and 108, or very nearly a third, of the deaths occurred in public institutions. The causes of 33, or 10 per cent., of the deaths in the city were not certified.

ROYAL COLLEGE OF PHYSICIANS.

THE quarterly Comitia of the College was held on Thursday last, the President, Sir Andrew Clark, Bart., in the chair. The President alluded in feeling terms to the loss sustained by the College in the death of Sir W. W. Gull, and the College passed a resolution of condolence and sympathy with Lady Gull and the family of the deceased Fellow. It was also resolved that the Registrar and one of the Censors should represent the College at the funeral.

On the motion of the President, a standing rule was adopted to the effect that the Comitia should not sit after 7 P.M.

The Treasurer announced the gift to the College of a portrait of Dr. C. L. Meryon, a late distinguished Fellow.

The following gentlemen were admitted Members of the College: William John Gow, M.D. Lond.; Edmund Hobhouse, M.B. Oxon.; William Wallis Ord, M.B. Oxon.; and William Bramwell Ransom, M.D. Lond.

A further report on Leprosy at the Cape, forwarded by the Colonial Office, was referred to the Leprosy Committee.

An intimation from Monaco, to the effect that no additional medical men would be allowed to practise in the Principality, was received from the Foreign Office. Copies of the new Dutch Pharmacopœia were also forwarded by the Foreign Office.

Permission was granted, on the application of Dr. Hack Tuke, for a cast of the bust of Dr. Conolly to be made for placing in an institution in Sydney devoted to the study of mental diseases.

Drs. E. Liveing, Ord, and N. Moore were appointed delegates to confer with Members appointed by the Council of the College of Surgeons upon questions arising out of the action of the General Medical Council in regard to diplomas in Public Health.

The report of the University Committee of the Royal College of Surgeons was read, and the consideration of the subject deferred until the committee appointed by the College had made its report.

The following Fellows were elected Councillors:—Dr. J. H. Bridges, Dr. Gee, Dr. Thomas Buzzard, and Dr. Payne.

On the motion of Dr. Allchin it was resolved for the second time to adopt a new bye-law, requiring of Fellows, Members, and Licentiates who intend to resign their position in the College to give notice of their intention to the Registrar, and that such resignations should be submitted to the College for acceptance.

The report of the Fever Hospitals Committee was received and adopted. It contained detailed instructions regarding the measures to be taken by students availing themselves of the privileges of study in these institutions; and other points which had been arrived at after conference with representatives of the Metropolitan Asylums Board. The thanks of the College were voted to Dr. Gee, the chairman, and other members of the committee for their labours, and they were requested to continue to act, in case any further details had to be arranged.

The Council having reported upon the question of English practitioners in France, pointing out the facilities under which French practitioners may practise in this country, or become registered on passing purely professional examinations, and also referring to the "reciprocity" clauses in the Medical Act, 1886, which empower this country to recognise diplomas of other countries provided the recognition is mutual, the report was adopted by the College, on the motion of Dr. C. T. Williams, seconded by Dr. Quain, and a copy of it was directed to be forwarded to the Foreign Office.

A recommendation of the Council that the regulations for the diploma of Public Health be made conformable with those of the General Medical Council was deferred until the report of the delegates was received.

The quarterly report of the Finance Committee was received, and it was resolved, on the motion of Dr. N. Moore, to increase the honorarium to Dr. Munk, Librarian of the College, by fifty guineas, in recognition of his long, learned, and invaluable services.

The annual report of the Examiners for the Licence was received. During the past year 469 licences were granted.

A report was received from the Laboratories Committee, in which Dr. G. Sims Woodhead was nominated for appointment as Director of the new laboratories. The report was adopted by the College.

The bye-laws relating to vice-presidents were repealed, and a new bye-law empowering the President, in his unavoidable absence, to appoint a Fellow of the College who has been a Censor to act as his vicarius, was passed for the first time.

THE SERVICES.

INDIA OFFICE.—The Queen has approved of the retirement of the undermentioned officers of the Staff Corps and Indian Medical Service:—Colonel Lacy Bowring Bance, Madras Staff Corps (dated Jan. 25th, 1890); Colonel Albert Francis Orchard, Madras Staff Corps (dated Jan. 25th, 1890); Colonel Albert Willoughby Foord, Madras Staff Corps (dated Dec. 12th, 1889); Colonel John Pyne Grant, Bombay Staff Corps (dated Jan. 1st, 1890); Major Frederick Chas. Napier Goldney, Bengal Staff Corps (dated Nov. 11th, 1889); Brigade Surgeon Edward Harley Raynsford Langley, Bombay Medical Establishment (dated Nov. 19th, 1889). The Queen has also approved of the retirement of Deputy Surgeon-General Philip Warren Sutherland, Bengal Medical Establishment, being post-dated to Feb. 5th, 1889.

ARMY MEDICAL STAFF.—Deputy Surgeon-General Geo. Moulas Slaughter to be Surgeon-General, ranking as Major-General, vice J. Ferguson, deceased (dated Jan. 14th, 1890); Brigade Surgeon Alexander Allan, M.D., to be Deputy Surgeon-General, ranking as Colonel, vice G. M. Slaughter (dated Jan. 14th, 1890); Surgeon-Major Wm. Keir, M.D., to be Brigade Surgeon, ranking as Lieutenant-Colonel, vice A. Allan, M.D. (dated Jan. 14th, 1890).

ADMIRALTY.—The following appointments have been made:—Staff Surgeon Mark A. Harte to the *Triumph* (undated); Surgeon Michael O'Brien to the *Triumph* (dated Feb. 4th, 1890); Surgeon William A. Whitelegge to the *Alecto*, and Surgeon Edward P. Mourilyan to the *Northampton* (both dated Jan. 25th, 1890); and William Prowse to be Surgeon and Agent at Port Isaac (dated Feb. 25th, 1890).

MEDICAL MAGISTRATE.—Mr. J. Thornton Duncan, F.R.C.P. Edin., M.R.C.S., has been placed on the Commission of the Peace for the borough of Stamford.

Obituary.

T. T. PYLE, M.D. DUR., J.P.

IT is with sincere regret that we have to chronicle the death of Dr. Thomas Thompson Pyle, which took place in London on Monday, Jan. 20th. Dr. Pyle's death will occasion much sorrow to a large circle of professional and private friends, to whom his kindly and genial disposition greatly endeared him. Dr. Pyle was the son of Mr. Pyle, a surgeon in large practice at Earsdon, Northumberland, and was born in 1837. He gave early promise of distinction in his profession. On leaving school he matriculated at Durham University at the age of seventeen. In 1857, and before he attained his majority, he became a Member of the Royal College of Surgeons of England and a Licentiate of the Society of Apothecaries. In 1859 he became a Bachelor of Medicine of the University of Durham, and in 1861 took his M.D. He studied at Durham University and at Paris. In addition to his strictly professional titles, Dr. Pyle laid claim to many distinctions. He was J.P. for Sunderland borough, the representative of the University of Durham in the General Medical Council, a member of the Senate of the same University, a Fellow of the Medical Society of London, honorary physician to the Marylebone General Dispensary, late honorary physician to the Sunderland General Infirmary and Dispensary, and house surgeon to the Durham County Hospital. He had contributed papers on the contagion of scarlatina and small-pox, diabetes, &c., and was considered an authority on health resorts. Dr. Pyle commenced practice in Sunderland in 1860, and quickly attained to a leading position. Five years later he was elected physician to the Sunderland Infirmary, where he did excellent work for many years, and was held in high repute. In 1864, the year before he became physician to the infirmary, he founded the Children's Hospital at Sunderland, which has ever since been one of the most useful and deserving benevolent institutions in the town. The Infirmary and Children's Hospital became, as it were, united in his person. Dr. Pyle had a severe illness about four years ago, and had been invalided ever since. He found it necessary to withdraw from practice and public duties of all kinds, and to give himself the benefit of rest and seclusion. These, however, did not avail. His malady deepened, and he passed peacefully away on Monday, Jan. 20th, as stated. The deceased married in 1862 Miss Elliot, the eldest daughter of Sir George Elliot, Bart., M.P. His wife, two sons, and a daughter survive him.

THOMAS WARBURTON BENFIELD, F.R.C.S., L.S.A.

THIS well-known surgeon died at his residence in Leicester on Jan. 16th. He was born in London in 1822, and was consequently sixty-eight years of age. His father, Robert Benfield, was a surgeon. Thomas Warburton Benfield was educated privately, and also at Hackney Grammar School, in the days when Archdeacon Churton was its head-master. Young Benfield was articled to the late Mr. Skey, and learned his work at St. Bartholomew's Hospital. At that medical school he was a distinguished student, and attracted the favourable notice of Sir George Burrows, Sir James Paget, and Mr. Vincent. In 1843 Mr. Benfield took the M.R.C.S. Eng., and in 1850 the L.S.A. In 1844 he became assistant to Mr. Nedham at Leicester, whose daughter he married. In 1850 he and his father-in-law became partners in the carrying out of a large general practice, to which Mr. Benfield succeeded after Mr. Nedham's death. From that time Mr. Benfield was busily engaged in practice, and as years passed by his work was much increased by his being often asked to see cases in consultation with the practitioners in his neighbourhood. In 1857 Mr. Benfield was appointed honorary surgeon to the Leicester Infirmary. In that capacity he proved himself to be a skilful and successful operator. His success as a lithotomist was specially remarkable. He continued to discharge the duties of surgeon to the infirmary until 1880, when he was appointed consulting surgeon to that institution. In 1859 he was elected to the distinction of F.R.C.S. Eng. Mr. Benfield held several important public appointments besides those already mentioned. He was surgeon to Her Majesty's Prison and Post-office, consulting surgeon to the Leicester and Rutland County Lunatic Asylum, surgeon to the Female Orphan Asylum and Infirmary Orphan Asylum, and he held some minor posts as well. In 1869-70 he was President of the Midland Branch of the British Medical Association. Latterly his health failed, and he took Dr. Moore into partnership and gave up much of his active work. He never, however, regained his health, and death from exhaustion supervened after a long illness, with painful vesical complications. In manner Mr. Benfield was gentle, modest, and retiring. He had ready tact in emergency and a singular faculty of obtaining and retaining the esteem and confidence of his patients. He always strove to sustain the dignity of his profession, and all good and benevolent work found in him a ready supporter. In politics Mr. Benfield was Conservative, and in religion a High Churchman; but those who most differed from him in both could live under his roof and feel that, above all distinctions of politics and of creed, he was a Christian and a gentleman, the like of which constitute the strength and the honour of the medical profession.

JAMES EDWARD ADAMS, F.R.C.S.

THERE died on Sunday morning (Jan. 26th) at the quiet village of Grately in Hampshire, a man who a few years ago gave substantial promise of being one of the leading surgeons of his time, and whose professional life was closed at a period when he had reached the zenith of his powers and had made for himself a distinguished and enviable reputation.

James Adams will long be remembered as one of the ablest and most brilliant of the surgeons whose names are associated with the London Hospital, as a remarkable operator, and as one of the most genial and most loyal of men. He was born in London, and was the son of John Adams, who for thirty-eight years had held the office of surgeon to the London Hospital, and who died in 1877. James Adams was educated at Merchant Taylors' School, and received the whole of his medical training at the London Hospital. His student career was very creditable, and among other distinctions he obtained the Hospital gold medal for proficiency in medicine. He graduated in Arts at the University of London. He was elected assistant surgeon to the Hospital in 1868 and surgeon in 1879. During the earlier years of his hospital career he was one of the demonstrators of anatomy at the Medical College, and during the later years the lecturer on surgery. James Adams was a man of remarkable physique, of indomitable energy, and of great personal strength. He was an enthusiastic sportsman. He took a great interest in athletics, and had distinguished himself in more than one department of that sport. Many London Hospital men will recall his well-developed figure, his military bearing, his almost amusing neatness, and his kindly and genial face. He was a man who appeared always in the most perfect health, strong, intensely alert and full of life, and possessed with the restlessness which comes of an active mind and a sound body. No one who saw James Adams some seven years ago could have believed that he of all men would in the course of a few months become helpless, and be compelled to resign almost everything he enjoyed in life. In the autumn of 1883 Mr. Adams discovered that he was losing the sight of one eye. Not many months elapsed before the blindness in the eye was complete, and then the terrible fact became evident that the sight of the other eye was going. Before he resigned his connexion with the hospital in September, 1884, James Adams, the brilliant operator, the already eminent ophthalmic surgeon, the enthusiastic athlete, was hopelessly blind. A more awful calamity could hardly be conceived, especially in a man of Adams's active disposition and predilections. It was evident that the ocular symptoms depended upon a central lesion. Mr. Adams retired to the little village of Grately, and remained for some year or so in excellent health and in good spirits. Cerebral symptoms soon, however, began to appear. His mind suffered, and after a series of convulsions he died comatose on Jan. 26th. The never-ceasing attention of his wife and the care of his many friends, and notably among them his old colleague Mr. McCarthy, did much to render his calamity less terrible and to brighten the period of desolation which must have followed the abrupt closure of an active and brilliant career. He had no children. Mr. James Adams was one of the surgeons at the Ophthalmic Hospital at Moorfields, and had an almost unequalled reputation as an operator. He possessed a perfect genius for surgery and a manual

dexterity which is among the rarest of gifts He was an admirable teacher and lecturer, and a man who earned the respect and admiration of all with whom he was brought in contact, by his sterling good qualities, his thoroughness, his manly vigour, and uprightness. Among the students of his time he was, as may be imagined, extremely popular, and many an old London Hospital man will hear with something more than mere regret of the death of their large-hearted friend "Jimmy" Adams.

FRED. W. GISBORNE MORGAN, M.B., C.M.

IN recording the death, at the early age of twenty-four, of Dr. F. Morgan, late dispensary surgeon to the Bradford Infirmary, we add another name to the long list of hospital residents who have died in the midst of their work. Dr. Morgan was a native of Ceylon, who studied at Edinburgh University, where he graduated M.B., C.M. in 1888. His illness was an acute septic fever of obscure origin and of a fortnight's duration, the prominent feature being pericarditis. He had previously become, like many hospital residents, much out of health owing to the arduous nature of his duties.

RICHARD CLAYTON, M.R.C.S. &c., J.P.

WE deeply regret to have to record the death of Mr. Richard Clayton, J.P., which took place at his residence, Ewbank House, Accrington, on Jan. 17th, from inflammation of the lungs, the result of a severe chill caught in the exercise of his duty a fortnight previously. He had the assistance of his son, Dr. James Clayton, and other medical men, including Dr. Leach of Manchester, Dr. Martin of Blackburn, and Dr. Dearden of Church. He was much respected in the neighbourhood in which he laboured for his unobtrusive liberality and kindness to the poor, and for the sympathetic interest he took in everything concerning the welfare of his native town. On the completion of his indentures, Mr. Clayton proceeded to college at Glasgow, and became a member of Anderson's College, Glasgow, in 1855, and qualified in 1858. The same year he obtained the diploma of the Royal College of Surgeons of England, and in 1868 became a Member of the Royal College of Physicians, London. He was vaccination surgeon, certifying surgeon under the Factory Acts, and medical officer for the union in Accrington. As a medical man he was held in high esteem, and was physician to some of the best families in the town and district. Mr. Clayton was fond of company, always cheerful and buoyant, very hospitable, kind, and generous. He was a man of many excellent parts, and will be sadly missed, not only from the council chamber and on the magisterial bench (to which he was appointed not very long ago), but in many a dwelling and many a cot.

DR. LEWIS H. SAYRE.

DR. LEWIS H. SAYRE, a son of Dr. Lewis A. Sayre, the well-known surgeon, was found dead on a sofa in the reception parlour of his father's home, at 285, Fifth Avenue, New York, on Jan. 3rd. He had been working very hard at his professional labours recently, and went home worn out and threw himself on the sofa and fell asleep. A servant was the first to discover his death. A necropsy made by Drs. Janeway and Biggs, of Bellevue, revealed organic disease of the heart, a condition of which his family were entirely ignorant, although it is said that Dr. Sayre himself had been for some months aware of its existence. He was born in New York in 1851, and graduated in 1876 from Bellevue Hospital Medical College, in which, at the time of his death, he was Assistant Professor of Orthopædic Surgery. He early distinguished himself in surgery, and his nobility of character and genial disposition made him one of the most highly estimated and popular practitioners in the city. For a number of years he had been the mainstay of his distinguished father, whose health has of late been much broken. Like his father, he took an active interest in all medical societies, and had already done much good work in connexion with the American Medical Association, the New York State Medical Association, the Academy of Medicine, the Pathological Society, and other scientific bodies. The funeral services were held at Grace Church on Jan. 5th, and the interment was in the family vaults at St. Andrew's, Harlem; the ground on which the latter church stands having been presented many years ago by his maternal grandfather. Dr. Sayre leaves a widow and three children.

Medical News.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen, having passed the necessary examination, were admitted Fellows of the College:—

John Cashin, L.R.C.S.I., and F. M. Harricks, L.R.C.S.I., L.K.Q.C.P.I.

Mr. Walter Kiddle, M.B., B.Ch. Univ. Dub. 1884, Surgeon Medical Staff, having passed the necessary examination, has been granted the diploma in Public Health.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates, having passed the qualifying examination in Medicine, Surgery, and Midwifery, have received certificates entitling them to practise in the same, and were admitted as Licentiates of the Society on Jan. 9th:—

Gwyn, Howard Weston, London Hospital.
Hinde, Sidney Langford, St. Bartholomew's Hospital.

On the 16th inst.:—

Walsh, Leslie Herbert, King's College Hospital.
Bäumler, Anna Magdalena Maximiliana, Zurich and Paris.

At the examination in Arts qualifying for registration as medical student, held at the Hall of the Society on Dec. 6th and 7th last, there were 168 candidates, of which number 110 passed—viz., 2 in the first class, 18 in the second class, and 90 in some subjects, but not in all. The next examination will be held on March 7th and 8th.

A GENEROUS GIFT.—It is stated that Mr. John Horniman of Croydon has given £25,000 towards establishing a seaside convalescent home for children.

UNIVERSITY COLLEGE HOSPITAL.—The Lord Mayor has consented to preside at a festival in aid of the funds of the above charity on Tuesday, Feb. 25th, at 7 P.M., at the Hôtel Métropole.

HOSPITAL SATURDAY FUND. — At an adjourned meeting of delegates of the above Fund, held on Saturday afternoon, the 25th ult., at the offices of the Fund, Mitre-court, Temple, Mr. E. H. Byne in the chair, the secretary, Mr. R. Frewer, reported that the sum of £14,000 had been collected during last year, as against £11,000 the previous year. The sum of £12,000 had been divided amongst the participating institutions. Subscriptions to the amount of £1360 2s. 0½d. had been received up to Jan. 24th for the current year.

PRESENTATION TO PROFESSOR ALLEN OF MELBOURNE, AUSTRALIA.—A large gathering of the members of the medical profession at Melbourne recently met to present Professor Allen, Dean of the Medical Faculty, with an illuminated address, a handsome bookcase, and a service of silver plate, on the occasion of his departure for a prolonged visit to Europe, as a token of their regard, and in recognition of his indefatigable zeal, work, and ability as honorary secretary of the Intercolonial Medical Congress of 1889. Professor Allen had been employed continuously for fourteen years in the Melbourne University, first as a demonstrator, then as a lecturer, and latterly as a professor. His medical experience had so far been entirely colonial, and he was anxious to supplement it by a visit to the older medical schools of Europe. The University Council has granted him leave of absence on half pay during the year 1890.

LITERARY INTELLIGENCE.—Messrs. J. & A. Churchill announce as in preparation the following works:—"A Manual of the Practice of Medicine," by F. Taylor, M.D. "A Treatise on Surgery," by C. Mansell Moullin, M.A., F.R.C.S. "Cranio-cerebral Topography, a Guide to Operations on the Brain by a New Method," by Alex. Fraser, M.B., C.M. "A Treatise on the Diseases of the Eye," by Robt. Marcus Gunn, M.A., F.R.C.S. "A Dictionary of Practical Medicine," edited by James Kingston Fowler, M.D., F.R.C.P.; also, uniform with the above, "A Dictionary of Practical Surgery," edited by Charters James Symonds, M.D., F.R.C.S. Seventh edition of "The Microscope and its Revelations," by Dr. W. B. Carpenter, C.B., F.R.S.; edited by the Rev. Dr. Dallinger, F.R.S. "The Diseases of the Male Organs," by W. H. A. Jacobson, M.Ch. Oxon. The third edition of "Gowers' Manual and Atlas of Medical Ophthalmoscopy." Fifteenth edition of "Squire's Companion to the British Pharmacopœia." "A Dictionary of Psychological Medicine," edited by D. Hack Tuke, M.D., LL.D. "Inorganic Chemistry," by W. Ramsay, Ph.D., F.R.S. "A Manual of Clinical and Practical Pathology," by Frank J. Wethered, M.D., and Walter E. Wynter, M.D. "A Treatise on Hygiene by various Writers, edited by Thomas Stevenson, M.D., F.R.C.P., and Shirley Forster

Murphy. "Terminologia Medica Polyglotta," French, Latin, English, German, Italian, Spanish, and Russian, by Theodore Maxwell, M.D., B.Sc., F.R.C.S.—We have received a copy of the first number of the *Medical Record*, a new journal published in Calcutta, and devoted to the interests of the medical profession. From the scientific and practical nature of its contents, it is likely to have a wide circulation, and thus succeed in filling up a very decided gap in the medical literature of India.

METROPOLITAN HOSPITAL, KINGSLAND-ROAD.—The annual report for 1889 shows a very considerable increase of both in-patients and out-patients during the year. During the year 3681 additional membership books had been issued, augmenting the total to 8126, representing upwards of 16,000 lives, and the attendances of provident members reached 42,718, against 29,088 in 1888. The provident principle is stated to have met an actual want without pauperising the poor. The number of beds available for in-patients had increased from 51 to 76.

THE SANITARY INSTITUTE.—The following (the ninth) course of lectures and demonstrations for sanitary officers will be delivered on the dates mentioned:—Feb. 18th: Introductory Lecture (Practical Considerations for Sanitary Officers), by Mr. E. C. Robins, F.S.A.—21st: Water-supply, Drinking-water, Pollution of Water, by Dr. Louis Parkes.—25th: Drainage and Construction, by Prof. H. Robinson, M.Inst.C.E.—28th: Ventilation, Measurement of Cubic Space, &c., by Sir Douglas Galton.—March 4th: Sanitary Appliances, by Professor W. H. Corfield.—7th: Scavenging, Disposal of Refuse and Sewage, by Mr. Charles Jones, Assoc.M.Inst.C.E.—11th: Food (including Milk), Sale of Food and Drugs Act, by Mr. C. E. Cassal, F.C.S.—14th: Infectious Diseases and Methods of Disinfection, by Mr. Shirley F. Murphy.—18th: General Powers and Duties of Inspectors of Nuisances (Method of Inspection), by Dr. J. F. J. Sykes.—21st: Nature of Nuisances (including Nuisances the abatement of which is difficult), by Dr. J. F. J. Sykes.—25th: Diseases of Animals in relation to Meat-supply, by Mr. A. Wynter Blyth.—28th: Sanitary Law (General Enactments, Public Health Act, 1875, Model Bye-laws), by Mr. A. Wynter Blyth.—April 1st: Sanitary Laws and Regulations governing the Metropolis, by Mr. A. Wynter Blyth.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BARBER, S. F., L.R.C.P.Lond., M.R.C.S., has been appointed House Surgeon to the Becket Hospital, Barnsley, vice Scott, resigned.

DAVIDSON, P., M.B., C.M., has been reappointed Honorary Physician to the Liverpool Infirmary for Children.

DIMMOCK, A. F., M.B. Dur., M.R.C.S., has been reappointed Assistant Medical Officer to the Harrogate Cottage Hospital.

DRYLAND, J. W., M.R.C.S., L.S.A., has been reappointed Medical Officer for Kettering.

GABE, J. R., M.D. Brussels, M.R.C.S., L.S.A., has been reappointed Medical Officer and Public Vaccinator for the Third District of the Holborn Union.

GEMMELL, J. E., M.B., C.M. Edin., has been appointed Honorary Anæsthetist to the Liverpool Dental Hospital, vice Henry Briggs, F.R.C.S., resigned.

GRANGE, F., M.R.C.S., L.R.C.P., has been appointed Junior House Surgeon to the Blackburn and East Lancashire Infirmary, vice R. J. Stephens, M.R.C.S., L.S.A., resigned.

HORSFALL, THOS., M.R.C.S., L.S.A., has been reappointed Medical Officer for the Bedale District of the Leyburn Union.

MACKAY, P. B., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the East District of the Doncaster Union.

MARSH, N. P., M.B. Lond., M.R.C.S., has been reappointed Honorary Physician to the Liverpool Infirmary for Children.

MILBURN, F. L., M.R.C.S., L.S.A., has been reappointed Medical Officer for the Fourth District of the Holborn Union.

O'BRYEN, JAMES J., M.D., L.R.C.P., L.R.C.S., L.A.H., L.M., has been appointed Medical Officer to the Sydenham Dispensary, vice J. Law, M.D., C.M., resigned.

OSBORNE, FRANK, M.R.C.S., L.S.A. Lond., has been appointed Resident Clinical Assistant to the Paddington Infirmary.

OZANNE, F. N., L.R.C.P. Lond., M.R.C.S., has been reappointed Assistant Medical Officer to the Harrogate Cottage Hospital.

PUGHE, R. N., M.B. Lond., F.R.C.S., has been reappointed Honorary Surgeon to the Liverpool Infirmary for Children.

ROBINSON, T. H., M.B., C.M. Edin., has been appointed Medical Officer for the Wendorn Sub-district of the Helston Union.

SAVAGE, THOS., M.D. St. And., M.R.C.P. Lond., F.R.C.S., has been appointed Honorary Consulting Physician to the Wolverhampton and District Hospital for Women, Chapel Ash.

WILLIAMS, N., M.B. Cantab., M.R.C.S., has been reappointed Medical Officer to the Harrogate Cottage Hospital.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

BRADFORD INFIRMARY AND DISPENSARY.—Dispensing Surgeon to visit patients at their own homes. Salary £100 per annum, with board.

CITY HOSPITAL FOR INFECTIOUS DISEASES, Newcastle-upon-Tyne.—Resident Medical Assistant for one year. Terms £50, but if reappointed £70 for the second year, with board, lodging, and washing.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House Physician for six months. (Apply to the Secretary, 24, Finsbury-circus, E.C.)

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—House Surgeon. Salary £60 per annum, with board and lodging in the hospital.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields, E.C.—Junior House Surgeon.

SALFORD UNION.—Assistant Medical Officer for the Union Infirmary near Eccles. Salary £140 per annum, with furnished apartments at the infirmary.

SCHOOL BOARD FOR LONDON. Offices: Victoria Embankment, W.C.—Medical Officer. Salary £400 per annum.

ST. MARK'S HOSPITAL FOR FISTULA ETC.—House Surgeon for twelve months. Salary £50, with board and residence in the hospital.

Births, Marriages, and Deaths.

BIRTHS.

CARDEW.—On Jan. 26th, at Dennington-park-road, West Hampstead, the wife of H. W. Denton Cardew, M.R.C.S., of a daughter.

DE WOLF SMITH.—On Jan. 7th, 1890, at New Westminster, British Columbia, Canada, the wife of W. A. De Wolf Smith, M.D., of a daughter.

SANDBERG.—On Jan. 27th, at Liverpool Lodge, Brixton-hill, S.W., the wife of Arthur G. Sandberg, M.D., of a daughter.

MARRIAGES.

BANSALL—LEE.—On Jan. 22nd, at St. Stephen's Church, Westbourne Park, W., Walter Henry Bansall, B.A., M.B., of Aylsham, Norfolk, to Gertrude, younger daughter of William Lee, Esq., C.E., F.G.S., of Woodfield Villa, W.

JONES—HIVES.—On Jan. 25th, at St. Marylebone Parish Church, Dr. Gordon Griffiths Jones, of Welbeck-street, Cavendish-square, W., to Anne Clara Hives (widow of the late W. Hives, Esq.), Chichilly Hall, Bedford.

LANGRAN—KNIGHT.—On Jan. 23rd, at Axminster, William Langran, L.R.C.P.E., eldest son of George Langran, Carlow, to Emily Mary Frances, third daughter of Henry Knight, of Cloakham, and Terrace Lodge, Axminster.

MACDONALD—PERCEVAL.—On Jan. 28th, at St. Peter's, Eaton-square, Roderick Macdonald, M.D., F.R.C.S.E., M.P. for Ross and Cromarty and Coroner for Middlesex, to Frances Emma Maryon, daughter of the late Mr. Spencer Perceval, of Eastbourne, and great-granddaughter of the Right Hon. Spencer Perceval.

DEATHS.

ADAMS.—On Jan. 25th, at Grately, James Edward Adams, F.R.C.S., formerly Lecturer on Surgery at the London Hospital Medical College, and Surgeon to the London Hospital, aged 45.

CHEVALLIER.—On Dec. 19th, at Melbourne, Australia, Charles Henry Temple Chevallier, M.B., C.M., son of the late Rev. Canon Chevallier, of Aspall Hall, Suffolk, aged 25.

DANIEL.—On Jan. 11th, at the Middlesex Hospital, Herbert Alfred Daniel, M.R.C.S., L.R.C.P., second son of the Rev. W. D. Daniel, of Wymondham, aged 25.

FERGUSON.—On Jan. 13th, at his residence, Cromwell-houses, Southsea, Johnston Ferguson, Surgeon-General Medical Staff, P.M.O. Southern District, aged 58.

GABB.—On Jan. 27th, at 18, Wellington-square, Hastings, David Hoadley Gabb, M.R.C.S., aged 68.

GRIME.—On Jan. 11th, suddenly, at South Shore, Blackpool, Henry Ainsworth Grime, M.R.C.S., L.S.A., L.R.C.P.E., J.P., late of Blackburn, aged 73.

LOVELL.—On Jan. 23rd, William Day Lovell, M.R.C.S., late of the Abbey House, Bradford-on-Avon, aged 42.

MOORE.—On Dec. 28th, 1889, at Stony Hill, St. Andrew, Jamaica, Edith, the eldest child of York T. G. Moore, L.R.C.P. Ed., M.R.C.S., aged 5 years 9 months.

MORGAN.—On Jan. 24th, at the Bradford Infirmary, Frederick William Gisborne Morgan, M.B., C.M. Edin., late Dispensary Surgeon to the Institution, aged 24.

ROBERTS.—On Jan. 17th, suddenly, of syncope, Carr Holstok Roberts, M.D., of Fernhead Lodge, St. Peter's-park, W., in his 55th year.

SORTAIN.—On Jan. 25th, Bertram Vésey Sortain, M.B., of Caius College, Cambridge, and Ceylon, aged 27.

TAYLOE.—On Jan. 21st, at Macaulay-road, Clapham-common, Edward Tayloe, M.R.C.S., late of South Lodge, Clapham-common, in his 79th year.

WHITEHOUSE.—On Jan. 26th, at Salisbury-road, Brighton, E. O. Wildman Whitehouse, F.R.C.S., F.R.A.S., &c., aged 73.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, February 3.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2.30 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.
LONDON POST-GRADUATE COURSE (Royal London Ophthalmic Hospital, Moorfields).—1 P.M. Mr. W. Lang: External Diseases of the Eye.
LONDON POST-GRADUATE COURSE (Hospital for Sick Children, Great Ormond-st., Bloomsbury).—4 P.M. Mr. John H. Morgan: Beginnings of Joint Disease in Children.
ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.
SOCIETY OF ARTS.—8 P.M. Mr. Silvanus P. Thompson: The Electro-magnet. (Cantor Lecture.)
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Edmund Owen: Selected Subjects in connexion with the Surgery of Childhood. (Lettsomian Lecture.)

Tuesday, February 4.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.
GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. G. J. Romanes: The Post-Darwinian Period.
LONDON POST-GRADUATE COURSE (Hospital for Diseases of the Skin, Blackfriars).—4 P.M. Mr. Jonathan Hutchinson: Malignant Diseases of the Skin.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Delepine: Sable Intestinal.—Mr. Lockwood: Retroperitoneal Hernia.—Mr. D'Arcy Power: (1) Ruptured Spleen; (2) Repair of Ruptured Kidney.—Mr. Solly: Myxofibroma of Pelvis.—Mr. Shattock: Malformation of Generative Organs in Fœtus, with Specimens of the (2) Male Hymen.—Dr. Little: Large Spleen from an Infant.—Mr. Robinson: Epithelioma of Lower Eyelid.—Dr. Wethered: Cancer of the Pancreas. Card Specimens: Mr. Robinson: (1) Lupus Verrucosus; (2) Duct Carcinoma of Male Nipple.

Wednesday, February 5.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M. Operations by the Obstetric Physicians on Thursdays at 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical Visits on Wednesday and Saturday at 9.15 A.M.
LONDON POST-GRADUATE COURSE (Hospital for Consumption and Diseases of the Chest, Brompton).—4 P.M. Dr. Kingston Fowler: The Diagnosis of Valvular Disease of the Heart.
LONDON POST-GRADUATE COURSE (Royal London Ophthalmic Hospital, Moorfields).—8 P.M. Mr. Quarry Silcock: Ophthalmoscopic Cases.
OBSTETRICAL SOCIETY OF LONDON (the Society's Library, 54, Berners-street, W.).—8 P.M. Specimens will be shown by Dr. Carter and others. Dr. Amand Routh: Urethral Diverticula. Annual Meeting. Election of Officers and Council. The President (Dr. Galabin) will deliver the Annual Address.
SOCIETY OF ARTS.—8 P.M. Mr. Arthur Paget: High-speed Knitting and Weaving without Weft.

Thursday, February 6.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.
LONDON POST-GRADUATE COURSE (National Hospital for the Paralysed and the Epileptic, Queen-square, Bloomsbury).—2 P.M. Dr. Buzzard: The Significance and Value of Tendon Reflex.
ROYAL INSTITUTION.—3 P.M. Mr. E. R. Mullins: Sculpture in relation to the Age.
LONDON POST-GRADUATE COURSE (Hospital for Sick Children, Great Ormond-st., Bloomsbury).—4 P.M. Mr. John H. Morgan: Beginnings of Joint Disease in Children.
CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA-PARK, E.—4.30 P.M. Dr. Glover Lyon: The Mechanics of the Chest in Disease.

Friday, February 7.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
LONDON POST-GRADUATE COURSE (Hospital for Consumption and Diseases of the Chest, Brompton).—4 P.M. Dr. Kingston Fowler: The Diagnosis of Valvular Disease of the Heart.
THE CANCER HOSPITAL (FREE), FULHAM-ROAD, BROMPTON, S.W.—4 P.M. Mr. Jessett: Intestinal Surgery for Malignant Diseases.
SOCIETY OF ARTS.—5 P.M. Dr. Schlich: The Utility of Forests and the Study of Forestry.
ROYAL INSTITUTION.—9 P.M. Mr. H. B. Wheatley: The London Stage in Elizabeth's Reign.

Saturday, February 8.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.
LONDON POST-GRADUATE COURSE (Hospital for Diseases of the Skin, Blackfriars).—2 P.M. Dr. Payne: Seborrhœa and Allied Affections.
ROYAL INSTITUTION.—3 P.M. Prof. Flower: The Natural History of the Horse, and of its Extinct and Existing Allies.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, January 30th, 1890.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Jan. 24	29·75	W.	38	37	60	54	36	·03	Hazy
,, 25	29·59	S.W.	54	52	62	56	38	·08	Overcast
,, 26	29·88	S.W.	43	42	76	52	39	·05	Cloudy
,, 27	29·84	W.	46	44	73	50	42	·12	Overcast
,, 28	29·73	S.E.	41	41	..	51	38	·27	Raining
,, 29	30·23	N.E.	37	35	65	44	35	·43	Cloudy
,, 30	30·37	W.	41	40	54	47	36	·05	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

TIGHT COLLARS AND VISION.

THE influence of tight collars in impeding the circulation in the head by pressing on the jugular veins is well known to military surgeons with the troops in India; but the bad effects of such pressure in cooler climates has been demonstrated by the observations of Prof. Förster of Breslau, who states that 300 cases have come under his notice in which the eyesight has been affected by the disturbance of the circulation caused by wearing collars that were too small. A large number of these cases were probably subjects of myopia.

Mr. C. K. Butt.—The trial was briefly reported in THE LANCET of Jan. 4th, p. 60.

A REAL GRIEVANCE.

To the Editors of THE LANCET.

SIRS,—I was present at a funeral at West Norwood Cemetery yesterday, which was attended by several ladies. To my astonishment I found that there were no retiring rooms provided for either ladies or gentlemen, and not even shelter, except such as is afforded by the chapel. Surely, the need of some such accommodation is urgent when it is remembered that many ladies drive from distant places, and when we consider what the effect produced by the long jolting in a carriage and by the nervous agitation natural on such an occasion must be in many instances. A waiting-room, with suitable sanitary arrangements attached, might easily be provided in close proximity to the chapel, and it would prove a great boon to many to be able to rest quietly for a few moments either before or after the funeral, and so regain a certain amount of composure. If the attendant were allowed to provide some hot coffee, this might prevent many a dangerous chill. I suppose this subject must have been discussed before, but your influence ought to bring about a reform which is so much needed.—Yours truly,

Plowden-buildings, E.C., Jan. 23rd, 1890. R. G. GLENN.

A PATHOLOGICAL SPECIMEN.

To the Editors of THE LANCET.

SIRS,—I send a 2-oz. bottle by this post, containing a substance—mucous membrane from alimentary tube probably. The patient, a young woman aged twenty-two, discharges from four to ten times this quantity from the bowel daily. She was suffering from chronic ovaritis and amenorrhœa. Oöphorectomy was performed two months ago, and ever since, and to a slight extent before, there has been an almost continuous discharge of this substance, often with much small worm-like, gelatinous material. The bowels act only with water injections, and were constipated both before and after operation. Both before and after the operation the skin of the whole body desquamated freely; then the skin became almost free for a time, and the same thing recurred again and again, and to some extent is associated with the discharge of mucous membrane from the bowel. I have another patient who desquamated freely after oöphorectomy, and I think it may be vicarious menstruation. Another patient of mine who had an infantile uterus had abundant desquamation of epidermis, lead-coloured and adherent, like ichthyosis, for six or nine months before death. She never menstruated, and died in convulsions at the age of seventeen. Could this also have been a case of vicarious menstruation?—I am, Sirs, yours truly,

Huddersfield, Dec. 2nd, 1889. J. W. DRAPER.

*** We have carefully examined the substance sent by Mr. Draper, and find that the gelatinous-looking material consists chiefly of aggregations of dead columnar epithelial cells; some of them are regularly arranged, and appear as if shed from the mouths of Lieberkühnian follicles. They are held together by a filmy, coagulated, mucigenous material. There is no sign of a basement membrane beneath them, and no indication of the mucosa of a mucous membrane. The appearances are suggestive of acute catarrhal inflammation. A large number of micrococci were present, but these had probably developed in the fluid after evacuation.—ED. L.

Oddfellow.—We should recommend a compromise, if possible; or, failing that, that our correspondent pay the whole charge. The other medical man would doubtless be considerate. He should have the facts carefully explained to him. Legal points should not be raised.

"INCONTINENCE OF URINE."

To the Editors of THE LANCET.

SIRS,—I thank Dr. Willson for his prompt notice of my letter on the subject of incontinence of urine, and in reply to his queries beg to say that the urine has for some time held slight traces of albumen, which have appeared and disappeared from time to time, and that, although symptoms of irritation consequent on the presence of ascarides have existed for some period, all vermifuges hitherto administered have failed in detecting their actual presence. Recently, however, an irregular movement of the head and extremities, almost identical with and characteristic of chorea, has appeared, the attacks occurring paroxysmally and varying in intensity, often disappearing altogether, and recurring at intervals. With regard to the incontinence of urine, the child is quite able to rise of herself to empty her bladder, but only does so at the earnest request of those in attendance on her.

I am, Sirs, faithfully yours,

Jan. 27th, 1890. T. S. G.

To the Editors of THE LANCET.

SIRS,—If "T. S. G." has not tried extract of belladonna in half-grain doses night and morning, I would suggest it, having found it succeed. The tincture does not seem to have the same effect.

I am, Sirs, yours faithfully,

Jan. 25th, 1890. E. W. J.

THE MOON FUND.

To the Editors of THE LANCET.

SIRS,—Kindly insert the accompanying list of subscriptions to the above fund in your next issue:—

Arthur E. Durham, F.R.C.S., £5 5s.; William Travers, M.D., £2 2s.; W. Morrant Baker, F.R.C.S., £2 2s.; J. R. Fothergill, M.D., £1 1s.; T. Browne O'Connor, Esq., £1 1s.—total, £11 11s. Subscriptions previously announced, £100 9s.

In the list of subscriptions published on Jan. 11th, "A. D. Turner, M.B." should have been *R.* Turner, *L.R.C.S.I.*

I am, Sirs, yours truly,

PETER HORROCKS, M.D.,

26, St. Thomas's-street, S.E., Jan. 28th, 1890. Hon. Treasurer.

Medical Charges.—Our correspondent is the best judge. The liberality of the lady in regard to previous attendance should not enter into the question of charges for the present. But neither should it be an argument for raising the charges to a maximum. Our correspondent should trust himself, rather than abstract tariffs.

THE YEAR-BOOK OF TREATMENT, 1890.

To the Editors of THE LANCET.

SIRS,—Will you allow me to point out an error in the section "Medical Diseases of Children," for which I am responsible? On page 121, lines 3 and 4, "tablespoonful" should read *teaspoonful*.

I am, Sirs, yours faithfully,

Weymouth-street, W., Jan. 25th, 1890. JAMES F. GOODHART.

CREMATION.

THE *Medical and Surgical Reporter* (Dec. 28th and Jan. 4th) gives the opinions of a large number of physicians upon the question of cremation. Amongst those interviewed are Dr. Alfred Stillé, Dr. Jas. H. Hutchinson (whose lamentable and sudden death from uræmia occurred the day before his opinions on the subject were published), Dr. Jas. W. Holland, Dr. Jas. C. Wilson, Dr. J. Solis Cohen, Dr. S. Weir Mitchell, Dr. W. W. Keen, Dr. H. C. Wood, Dr. D. Hayes Agnew and Dr. W. Pepper. With very few exceptions, all concurred in the preference, from a hygienic point of view, of cremation over inhumation; but some did not think that the question was an urgent one at present, whilst as to the disposal of their own remains they expressed indifference, or would leave it to the feelings of their family to decide. Dr. H. C. Wood, however, thought the question of little importanc considered cremation unnecessary, and did not believe in groun pollution.

C. M. F.—We are inclined to agree with our correspondent. It is not fit that a man with 18*s.* a week and a member of a club for eighteen years should be made a pauper in the matter of the medical attendance on his children. The guardians pay a poor compliment to thrift in giving orders in such cases. Our correspondent should protest.

M.D. should consult a text-book on Medicine—e.g., Bristowe's.

Mr. J. R. Wallace (Calcutta).—We cannot exchange.

INFLUENZA AND ZYMOTIC DISEASES.

To the Editors of THE LANCET.

SIRS,—All persons are now aware of the possibility of zymotic disease being communicated from animals to man. May I be permitted to ask if sufficient attention is being paid to the possibility of disease organisms generally living and breeding in things not alive and thence spreading to man; and, if this is possible, the necessity of ascertaining the laws governing such life? Gelatine cultures show its possibility; malarial fevers (if due to an organism), coupled with the persistence for generations of malaria in certain districts, would, I suppose, suggest continuity, and therefore succession of life in respect to such fevers. Then the small quantity of infective matter causing widespread epidemics, as in the Caterham and various dairy cases, the obstinacy with which in older days gangrene, erysipelas, and puerperal fever clung to foul wards, and the suggestion that scarlet fever in adjacent cottages has followed the spreading of manure in a field, would all be explicable if the organisms bred in the adit, or the water, the milk, the walls, or the manure. If disease does so live, then no wonder that in the dirty ages, when rushes and filth were deposited in narrow unpaved streets, pestilence prevailed; no wonder also that gaol and camp fever raged. Now it appears that influenza attacks particularly people in barracks, schools, and large establishments (not simply spreads among them); if so, why should this be, unless it can breed in impure air or surroundings? and why should the removal of filth and general cleansing be recommended when an epidemic is feared? Not on account of the general lowering of health, for some people seem for years to flourish and thrive in the midst of dirt.—I am, Sirs, your obedient servant,

Dec. 30th, 1889. E. L. R.

"A CASE OF RHEUMATIC FEVER."

To the Editors of THE LANCET.

SIRS,—On reading the report of the case of rheumatic fever recorded by Dr. Evelyn Alston in your issue of the 25th, I cannot but think that the dose of salicin given was too small, and the period of its exhibition too short, to have produced an appreciable effect. I believe it is now generally admitted that twenty-grain doses of the drug every two or three hours at the outset, and occasionally more, according to the severity of the case, are necessary to diminish the pain in this disease. While not wishing to deny the possible utility of the Russian bath, yet I think the administration of salicin was hardly heroic enough to render justifiable a comparison between the two methods of treatment, or the suggestion that a "steam chamber and needle bath be included in the necessary equipment of every hospital."

I am, Sirs, yours faithfully,

HERBERT E. VINCENT, M.D., B.S.Lond.

Wanstead, E., Jan. 27th, 1890.

PLEURO-PNEUMONIA.

To the Editors of THE LANCET.

SIRS,—Allow me to correct a small inaccuracy in the report of my paper on croupous pneumonia read at the meeting of the Medical Society of London on Jan. 13th.

"Pleurisy was present in 1 in 5 cases on the corresponding side." Pleurisy was almost always present in the cases enumerated; but in 1 in 5 cases of all those observed with respect to this point there was pain, and probably therefore pleurisy, on both sides of the chest. In one case, as stated in the report, pleuritic membrane without pneumonia was found post mortem on one side, pleurisy with pneumonia on the other side; there was pericarditis also.

I am, Sirs, your obedient servant,

Leeds, Jan. 28th, 1890. T. CHURTON, M.D.

ERRATUM.—The name following the description in our last issue of the Expansion Trocar, p. 190, should have been *R. C. G.* Durdin

UNIVERSITY OF LONDON.

IN the report of the meeting of Convocation the name of the gentleman who strongly protested against lowering the value of the medical degrees by conferring the M.D. upon those who hold the M.B. degree should have been given as that of Dr. William Dale of King's Lynn.

Dr. Strahan (Northampton).—Very shortly.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Parke, Cairo; Dr. B. W. Richardson; Dr. Goodhart, London; Dr. Mortimer Granville, London; Mr. Keetley, London; Dr. Sisley, London; Sir P. Eade, Norwich; Sir E. Lechmere, London; Messrs. Merryweather and Simpson, Gisborough; Dr. M. Thomas, Glasgow; Mr. Lindsay Johnson; Dr. Mott, London; Dr. Sinclair, Manchester; Mr. Bland Sutton, London; Dr. Whipham, London; Messrs. Hopkinson and Co., Nottingham; Dr. H. Snow, London; Messrs. Mottershead and Co, Manchester; Mr. Haviland, Douglas; Messrs. Smith, Elder, and Co., London; Mr. W. A. Ellis, London; Dr. Horrocks; Messrs. Smith and Son, Manchester; Mr. E. Dukes, St. Leonards; Messrs. Christy and Co., London; Mr. Haslam, Birmingham; Messrs. G. Street and Co., London; Dr. Knott, Dublin; Dr. Churton, Leeds; Messrs. Clarke and McCartan, Belfast; Dr. Fleming, St. John's; Messrs. Oliver and Boyd, Edinburgh; Dr. W. Nicholson, Greenwich; Dr. Dale, King's Lynn; Mr. A. Mackay, Aberdeen; Dr. Blackman, Portsmouth; Mr. G. Cowell, London; Dr. Williams, Ventnor; Dr. Bagshawe, St. Leonards; Mr. Boxhorn, Paris; Dr. T. D. Acland, London; Mr. Dalton, Rottingdean; Dr. McLintock, Bradford; Dr. Gordon, Ilkley; Dr. Lewers, London; Dr. Collings, Guernsey; Mr. Sillar, London; Mr. Davidson, Buxton; M. Alcan, Paris; Mr. Roberts, Sheffield; Dr. Williams, co. Down; Dr. Ringwood; Mr. Fuge, Taunton; Mr. Griffiths, Manchester; Dr. Storey, co. Leitrim; Dr. Largeau, France; Mr. Coombs, Bridgwater; Mr. Watts, Glasgow; Dr. Heron; Messrs. Herbert and Jones, Kensington; Mr. Smith, Liverpool; Mr. Godfrey; Dr. Theodore Acland; Mr. Clement, London; Mr. Plumbe, London; Sir Henry Acland, Oxford; Dr. Glover, London; Mr. Denham; Mr. William James, London; Mr. Woodruff, London; Mr. Nye; Mr. William Fraser, London; Mr. Pollock, London; Mr. Best, London; Mr. Henry Godbolt; Mr. Barford, Wokingham; Mr. Philp, London; Mr. James Perkins, Kensington; Mr. Bignall, London; Mr. F. T. Husband, Pimlico; Mr. R. Playford, London; Mr. Gant, London; Mr. Hey, London; Mr. A. P. Skene, Pornie; Dr. T. B. Graham, Bradford; Mr. Keener, Chicago; Herr Reimer, Berlin; Mr. Martindale, London; Mr. H. M. Hurd, Baltimore; Mr. Kelynack, Manchester; Messrs. Isaacs and Co., London; Mr. Hodgetts, Toronto; Mr. R. G. Glenn; Hon. Walter Bethell, London; Mr. Beddoes, Aston-on-Clun; Messrs. Keith and Co., Edinburgh; Mr. Harricks, Dublin; Mr. S. Watson; Mr. Havelock Ellis, Redhill; Mr. Quinby, Liverpool; Mr. Blackmore; Mr. Still, New York; Dr. Walter, Manchester; Mr. Day, London; Messrs. Bailey and Son, London; Dr. Jessell, London; M. O. Berthier; Mr. Lennox Browne, London; Dr. Menzies, Brighton; Herr Hirschwald, Berlin; Mr. Shera, Harrogate; Dr. Balfour, Worcestershire; Miss Brown, Balham; Mr. Holmes, Derby; Mr. Herbert, Jersey; Mr. Livingstone, Edinburgh; Mr. Bagshaw, Salford; Mr. Herschell, London; Mr. Gust. Fischer, Jena; Mr. R. Coombe, Exeter; Mr. Thorne, London; Dr. Fische, Innsbruck; M. Gordoux, Lausanne; Mr. Graham, Hernehill; Dr. Rogman, Brussels; Dr. Sullivan, Kerry; Messrs. Bullock and Co., London; Dr. Roche, Kingstown; Messrs. W. H. Smith and Son, London; Dr. Auld, Glasgow; Dr. Elder, Nottingham; Dr. Bezly Thorne, London; Dr. Macall, Morecambe; Dr. Mackintosh, Lavenderhill; Mr. W. H. Bennett, London; Mr. C. K. Butt, Bristol; Mr. W. Marriott, London; Dr. Woodhead, Edinburgh; Dr. Lionel Beale London; Surgeon-Major Barker, London; Mr. Doré, London; Dr. B. Pettigrew, St. Andrews; Mr. Atkinson, Surbiton; Dr. Bennetts, Chatham; Mr. Santi, London; Mr. Johnson, London; Mr. Fisher, Guildford; Mr. Armstrong, Newcastle-on-Tyne; Mr. Milligan, Manchester; Mr. Kingzett, London; Mr. Boehm, London; Mr. Baker, London; Messrs. Dewart and Sons, Perth; E. W. J.; G. F.; East-end, London; Medicus, Fleet-street; The Kops Co., London; T. S. G.; M.D.; L. U., London; Secretary, North Staffs. Infirmary; Alpha, Kent; Omega, London; Editor, *Richmond Times*; Matron, Coventry &c. Hospital; Studio; Medical Supply Association; Matron, Portsmouth Hospital; Secretary, Bradford Infirmary; Antiseptic.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Scriven, Derby; Mr. Hensley, Basingstoke; Dr. Lindsay, Utah; Dr. Nickoll, Victoria; Mr. White, Bradford; Mr. Fraser, Clitheroe; Mr. Thomas, Liverpool; Mr. White, Nottingham; Mr. Peel, Cheshire; Mr. Tyte, Minchinhampton; Mr. Thornburn, Cumberland; Mr. Nicholls, Bury St. Edmunds; Mr. Anderson, Carmarthen; Messrs. Richardson and Co., Leicester; Dr. Grevill, Stockton-on-Tees; Mr. Williams, Market Drayton; Mr. Randolph, Taunton; Mr. Bonner, Bristol; Mr. Cherry, Manchester; Miss Lush, Hawkhurst; Dr. Gibson, Birchington-on-Sea; Mrs. Walker, Rugby; Mr. Craig, Wick, N.B.; Mr. Hey, Maidahill West; Dr. Nugent, Colchester; Mr. Tully, Hastings; Mr. Dix, Southampton; Mr. Fleming, London; Mr. Gardiner, Ashton-under-Lyne; Mr. Tooke, Slough; Mr. Jones, Battersea-rise; Mr. Cairns, Selkirk; Mr. Robertson, Edinburgh; Mr. Hutchinson, Lancashire; Mr. White, Devonport; Mr. Couzens, Sheffield; Messrs Macleh and Sons, Glasgow; Mr. Hilliard, Ealing; Dr. Wolf Smith, British Columbia; Mr. Peacock, Hull; Dr. Somers, Roscrea; Messrs. Waltham Bros., Stockwell; Mr. Fitzgerald, Queenstown; Dr. McMordie, Belfast; Mr. Wolseley, Birmingham; Mr. Yeoman, Cheshire; Dr. Martin, Worcester; Mr. Hornibrook, Bloomsbury; Mr. Daniell, Blandford; Mr. Appleton, London; Dr. Aitchison, Blackburn; Mr. Grange, Blackburn; Brigade-Surgeon Wearne, Penzance; Mr. Heywood, Manchester; Mr. Crickmay, Suffolk; Mr. Lush, Andover; Dr. Hilliard, Aylesbury; Mr. Paine, Worthing; Mr. Capel, London; M. Cardinet, Paris; Mrs. Martin, Kensington; Mr. Gordon, Bradford; Mr. Bryan, Nottingham; Dr. Dewhurst, Lambeth; Messrs. Maclachlan and Co., Edinburgh; Mr. Scott, Rotherham; Dr. Windle, Halifax; Mr. Cluff, co. Tyrone; Mr. Harvey; Mr. Ungent, co. Meath; Mr. Stanley, Newport; Royal Infirmary, Liverpool; M. G. C., London; Secretary, Durham County Hospital; Canary, London; Cymro, London; Hospital for Consumption, Hampstead; R., Dewsbury; Ala, London; Rotherham Hospital; M. M. M., London; Practice, London; Matron, Cardiff Infirmary; Deputy, London; Superintendent, Brixton-road; The Hermitage, Yorkshire; Alpha, Manchester; Secretary, Worcester General Infirmary; M.D., F.R.C.S., Newcastle-on-Tyne; Manchester Royal Infirmary; S. L., London; Banner, London; Cremin, South Wales; A., Devonport; X. Y. Z., London; K., London; E. G., Stoke Newington; Bruxelles, London; Lancashire, London; Medicus, Great Yarmouth; Delta, London; Medicus, Margate; Owner, Willesden Junction; B., Manchester; Z., Selhurst; Maltine Manufacturing Co., Bloomsbury; Matron, Southampton; L.R.C.P., Lavender-hill; E. C., London; Fisher, Guildford; C., Anerley; Medicus, Harrow-road; A. B., Dorset; R. & W., London; Medicus, Wandsworth; F. A., London; A. B. C. D., London; Medico, Bradford; Advertiser, Berners-street; Rural, London; Ceres, London; R. W. B., Millwall; Surgeon, London; Jeyes' Sanitary Co., London.

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